Public Health Practice

Stories from the Field
Student Practicum Experiences
Summer 2011
The University of Texas School of Public Health
Houston Campus
The practicum experience is an integral part of the MPH curriculum. Public health students are provided with the opportunity to apply their classroom knowledge to real world settings through which they make a meaningful contribution to a public health organization.

Under the guidance of a community preceptor and faculty sponsor, students from all divisions gain a deeper understanding of public health practice, interact with professionals in the field, and expand their repertoire of professional skills.

This fifth-edition e-magazine showcases student practicum experiences throughout the Summer 2011 semester. (Prior semesters may be accessed through the e-book, a collection of student abstracts and e-magazines describing their experiences.)
### Practicum Topics

**Serving Size:** 1 Practicum per Student  
**Servings per e-Magazine:** 107

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#### Environmental & Occupational Health Sciences

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*Megan Holderness*

*Clostridium difficile*

Jamie Huang

MRSA Control

Zehra Hussain

Depression & Cancer

Amit Jethanandani

HIV/AIDS

Kathryn Kimbrough

Breast Cancer

Ashutosh Lodhi

Neuroepidemiology

Holli Loomans

Burkitt Lymphoma

Briauna Lowery

Infection Control

Lucila Marquez

National Children’s Study

Yuan Mei

*Clostridium difficile*

Priyankana Mishra

Infectious Disease in Ecuador

Heather Murray

HIV & Pneumonia

Mahwish Mushtaq

Gliogene Study

Darryl Nousome

Pediatric Cancer

Takei Pipkins

Evaluation of MRSA Intervention

Lauren Pokomo

Food Bank

Allison Ryan

Osteoporosis & Vitamin D

Anshuman Sewda

Prevention of Esophageal Cancer

Sarah Tambra

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Michelle Wilkinson

**Health Promotion & Behavioral Sciences**

National Children’s Study – Recruitment & Retention

Sarah Cancelmo

Free Lunch Program

Betty Del Rio Rodriguez

Worksite Wellness

Mary Eckhardt
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A Proactive Assessment of Nosocomial Infection Prevention at UT Physicians Clinics

By: Cristina Alvarez

According to the CDC, nosocomial infections, also known as Healthcare-Associated Infections (HAIs), are caused by exposure to various types of bacteria, fungi, and viruses during medical treatment procedures. My practicum focused on the possible acquisition of infection from the healthcare environment. I reviewed the standard operating procedures of the UT Physician Clinics and conducted site visits to learn about how the procedures were put into practice. I created a questionnaire focused on cleaning and disinfection procedures on high touch items such as exam beds, waiting room chairs, blood pressure cuffs and examination scopes. My preceptor established the contacts for the clinics visits. I observed the products being used and spoke with personnel. I summarized my findings and observations in a power point presentation.

Public Health Significance

Nosocomial infections can and should be prevented. When you visit a healthcare facility you expect health and not illness to be the result of your visit. As public health professionals we are expected to be responsible for and have solutions to any problems that arise. My practicum was a great opportunity to learn about clinical settings and procedures. I think the main essential public health services I learned and that were addressed during my practicum were diagnosing and investigating health problems and hazards and evaluating the effectiveness and quality of health services. All of the clinics were different, so each site visit provided unique information and unique questions. I searched for information in current literature and from regulatory agencies on different cleaning and disinfection protocols to better understand what the expectations were and how the procedures in place at UT Physicians compared. After evaluating the information, I tried to decide where improvements could be made, and how they could be successfully implemented.

Methods/Duties:

- Review OSHA Regulations and CDC Guidelines
- Review product information sheets
- Meet with clinic Staff for site visits
- Created questionnaire
- Summarized findings and recommendations

“Cleaning and disinfection are only effective if the products are used according to established instructions.”

These are some of the cleaners and EPA-Registered disinfectants used in the clinics.

C Alvarez Summer 2011
Lifestyle Screening Tool

Lifestyle Screening Tool: a positive lifestyle change among WIC mothers and children 2-5 years of age.

Childhood obesity in the preventive care stage requires frequent assessment of lifestyle risk factors associated with unhealthy eating practices and inadequate physical activity.

My role was to review, assess, and validate a Lifestyle Screening Tool presently used at HDHHS WIC setting. I was mainly interviewing WIC clients and WIC staff to identify difficulties related to the current used questionnaire. After returned feedback, we modified some of the questionnaire’s verbiage and shortened the Lifestyle Screening Tool. Moreover, after several debates we have decided on a final survey, which was released and set as a pilot test and retested. Overall, analyzing the reliability of each question of the survey by using the test-retest method, I have observed that 80% of WIC clients had similar answers. Therefore, the set survey showed a clear understanding of the questions among interviewed clients. Due to the age specifications, some of the surveys were not considered. Also, it was observed that overweight/obese mothers did not perceive themselves as being overweight. The validity of the collected data would perhaps require more time and tests.

Public Health Significance

Overweight and obesity in preschoolers is a considerable public health problem in the United States. The number of adolescents who are overweight has tripled since 1980 and the prevalence among younger children has more than doubled. Developing and designing specific lifestyle screening tools would increase parents’ awareness and change children’s lifestyle behaviors.

Public Health Essential Services (PHES)

- **Monitor** preschoolers’ growth, physical activity, and eating behaviors.
- **Inform and educate** mothers about obesity health consequences.
- **Develop policy and plans** that assist preventing obesity.
- **Research** food eating patterns according to the current society needs.

Special events/duties during your practicum

- Evaluate lifestyle screening tool amongst preschoolers
- Helping to attempt changing lifestyle behaviors
- Reviewing the survey questionnaire answers and analyzed data

“Obesity epidemic is currently today’s society silent killer; changing lifestyle behaviors is the number one step of our children’s obesity prevention.”

Source: Marta Apostu/WIC

Source: http://desiakhbar.com/article/healthy-food-habits/special-events/

EOH • Marta Apostu • WIC • Lifestyle Screening
The Baker Hughes Journey

The oil and gas industry involves a lot of dirty, smelly, noisy work. It is the responsibility of the Industrial Hygienist to make sure conditions don’t become hazardous to health and safety of the worker. This is done by observing a job task from start to finish and performing sampling to ensure exposure levels are within established limits.

Our group developed exposure prioritization lists for the sites we visited. We then created Health Hazard Profiles (HHP) for processes we determined to be high risk. These 2-3 page profiles are designed to inform and recommend appropriate industrial hygiene practices.

We communicated with the workers, obtained material MSDS’s and existing monitoring data, researched corresponding chemical exposure limits and NIOSH sampling methods, and observed controls in place. This information was used to build the HHP’s.

Public Health Significance

The HHP’s served as a convenient resource to inform, educate, and empower HSE professionals about hazards associated with a job task. The HHP’s I developed included tasks performed at several of Baker Hughes’ operating divisions— from Baker Oil Tools to Hughes Christensen to Baker Petrolite.

The profiles are just one of many tools Baker Hughes uses to establish a responsible safety and health culture in the workplace. Prior to each shift, area safety managers hold a 5-10 minute safety session with all employees to discuss any concerns they have. Safety and health requirements are patrolled and enforced by ALL workers. They are encouraged to be assertive in spotting risky situations. I hadn’t stepped but 5 feet inside a machining warehouse before a worker pulled me aside and told me I had to have safety glasses on.

Baker Hughes also has a stop-work policy that allows workers to immediately stop a task if they feel it is unsafe.

I really enjoyed my time with Baker Hughes. I’m excited to learn more about the energy industry.
Public Health Significance

The project addresses several of the essential public health services including:

Researching for new insights and innovative solutions to health problems; in this case, asthma.

Diagnosing and Investigating health problems and health hazards in the community.

Monitoring of health status to identify and solve community health problems.

The relationship between environmental proteinases in the home and the development of childhood asthma

By Oladunni Enilari

The project aimed at determining the relationship between proteinase activity measured in household molds and dust and the development of childhood asthma.

The project is a case-control study with the participants being children with and without asthma.

The study comprised of home visits, collection of dust samples, assessment of air quality and phlebotomies conducted on the participants. A walk through survey was conducted by a technician and subjects were asked to fill a questionnaire. My role was to enter the data into the Cardiff Teleform system. I helped the study team in sorting out the dust samples, collected from home visits and also in calculating house volumes.

This is an on-going study and the analysis is pending.

"Asthma is the most common chronic disease among children"

Asthma Fact Sheet, World Health Organization- May 2011

Molds are one of the important triggers of asthma
Public Health Significance

AMEC is a global company, with locations in 30 countries. As a whole they provide many different public health services.

Those that I experienced most closely involve informing, educating, and empowering people about health issues and enforcing laws and regulations that protect health and ensure safety.

The HASPs I mentioned earlier are a prime example of AMEC employees informing and educating people (workers) about health issues. Education and empowerment also happen with site visits when consultants can speak to specific issues and demonstrate safe practices in-person.

AMEC IH consultants also help to ensure that all laws and regulations are adhered to. Consultants research and present controls and personal protective equipment (PPE) that will prevent workers from being over-exposed to chemical hazards, for example.
**Occupational Medicine Ambulatory Clinic**

**By: Thomas Hysler MD**

The average worker has many different health attributes that must be addressed before, during, and after going to work for a company. These may include preventative wellness, injury, disease, exposure, and treatment.

This practicum experience allowed for involvement of every aspect of the occupational medicine global environment.

Several concepts were incorporated into this experience including diagnosing and treating illness and disease, issues with worker’s compensation, the business side of medicine, and public relations.

Communication was key in establishing a solid foundation of relationships among staff, physicians, employees and employers.

**Public Health Significance**

This experience utilized most aspects of the Essential Services of Public Health. As an OccMed physician you are responsible for investigating all possible theories and solutions to a given problem. This may include investigating and diagnosing an injury or exposure, informing the employee/patient and employer of the health concerns, enforcing OSHA standards of care, linking patients to outside follow-up care, and researching alternative ideas and treatments.

The occupational medical physician and clinics is the gatekeeper for a successful company and the health of its employees.

Without proper identification and management of health issues, both the employee and company would falter.

**A Positive Impact**

- The ability to help heal injured workers
- Opening a dialogue concerning public health
- Discussing preventative methods to achieve overall wellness

“A healthy employee makes for a healthy company.”

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ACOEM logo source: ACOEM.org
The Brazos Valley Telehealth Network

Implementing the Brazos Valley Telehealth Network

By: Thanh-Uyen Nguyen

The Brazos Valley Telehealth Network (BVTN) Program was implemented to provide rural patients, especially HIV+ and incarcerated patients, with doctors located in the Bryan/College Station area through the use of telecommunications equipment. This program was conceived because HIV+ residents in the Brazos Valley utilize a large percentage of federal funds on transportation getting to and from the doctor’s office. My role in this project consisted mainly of document creator and organizer. Goal matrices, implementation plans, and user guides are a sample of the documentations I created during my practicum. My role as an organizer comprised of scheduling equipment installation and training, the scheduling of meetings among various program stakeholders, and organization of program materials. As the program has yet to be implemented, unfortunately, there are no findings to report.

Public Health Significance

The BVTN Program most embodies the link service of the Essential Services of Public Health. Telehealth in general connects people to health services when they would not otherwise be able to access healthcare. The Brazos Valley can be geographically isolated in certain areas forcing residents to travel for many miles to receive healthcare, especially specialty care such as HIV healthcare. Therefore, with this telehealth program, such patients will be able to access quality healthcare more easily.

The BVTN also mobilized the community, medical stakeholders to bring the healthcare they could provide to the rural and incarcerated persons living in remote areas in the Brazos Valley. As this program is the first of its kind in the Brazos Valley, it will also develop the policies and plans for any future expansion of telehealth in this area.

Special events/duties during your practicum

- Working with community stakeholders to bring telehealth to the Brazos Valley
- Honing documentation creation skills
- Working with field expert Dr. Alexander Vo

“Telehealth allows for real-time, interactive video-conferencing between a healthcare provider and the patient over any distance.”
**Environmental Health Risks of Houston**

**Environmental Health Assessment of priority pollution concerns in Houston, Texas. By Anushuya Ramakrishnan**

Eight priorities were identified by Houston Department of Health & Human Services (HDHHS) Bureau of Pollution Control and Prevention (BPCP) in its objectives for fiscal year 2012 to align with the HDHHS mission, to protect public health by improving the quality of ambient air, water and land in Houston. These priorities include pollution control from automotive businesses, metal crushing plants, 9 significantly impaired bayous and streams, and reduction of air toxics from gasoline stations. These priorities were identified based on their level of emission of pollutants and control of these emissions is crucial in this fiscal year to protect the health of Houstonians.

**Objective: Historical Data Tracking and Analysis:**

To gain insight into BPCP activities and review data emissions for evaluation of pollution levels. Perform data analysis to track the trends of emissions from the operators of different facilities in Houston.

**Outcomes:** Preparation and update of BPCP internal activity and planning reports and preparation of a final comprehensive report and power point presentation to provide technical and analytical argument for support and maintenance of bureau resources.

Through enforcement activities, the bureau has increased its efforts towards pollution control from metal crushing plants in reducing their emissions that cause health effects on Houstonians.

Active efforts are being pursued to identify the source of E-coli contamination in nine (9) significantly impaired priority bayous/streams in Houston. Efforts are also focused on identification, elimination and prevention of illicit discharges from point sources located within the watersheds. This would help reduce the number and magnitude of exceedances for problematic sites.

More than 224 gasoline stations have been identified and selected for investigation based on their location in proximity to sensitive receptors; they actively monitored.

The bureau is continuously attending to the complaints of citizens and stakeholders and conduct enforcement to achieve compliance.

Air Quality is an important issue in public health, as it deals with emissions that cause health effects on the health and environment of citizens living in Houston.

**Protection of Air, Water & Land is critical to the health and well-being of Houston residents**

**Photos Source: BPCP, HDHHS**
Public Health Significance

My report contributes to public health in that I was able to summarize what air quality issues GCHD should focus on and further investigate and inform the public on how these pollutants can affect their health. This closely mirrors the services of monitoring the health status in Texas City to identify what air quality issues GCHD should be most concerned about and informing, educating and empowering the public on what they can do to limit their exposures and reduce ambient levels of these pollutants.

The Environmental Health Director for GCHD will use this data when he meets with the Texas Commission for Environmental Quality (TCEQ) to support why Texas City needs more air monitors so that they can proceed with a formal assessment of these pollutants. This closely mirrors the services of diagnosing and investigating a potential health problem in Texas City.

An environmental health risk assessment of hazardous air pollutants (HAPs) in Texas City, TX

By: Jazmin Ruiz

I worked with the Environmental Health division of the Galveston County Health District (GCHD) to identify the top HAPs in Texas City local residents should be most concerned about and determine whether current ambient levels of these HAPs meet state/federal guidelines. I also provided data regarding estimated human health risks associated with each of these HAPs.

For the most part, this was an independent assignment that involved data collection and exploration into government databases. The final product was a formal written report and a brochure/handout that conveyed my findings that could be handed out to the local community.

Of the top 10 HAPs, benzene is of most concern in Texas City and may exceed the acceptable level of risk set by the TCEQ. This data helps to form the basis for further investigations and requests for additional monitoring.

“...There are no federal or state standards for HAPs, only guidelines. It is up to the GCHD and the local community to be an advocate for their own health...”

Practicum Highlights

• Develop GCHD’s 1st ever environmental health risk assessment.
• Learn the ins and outs of how the government conveys the data. It is not as easy to find and interpret as you would think it would be.

HAPs Assessment - Texas City
Occupational Health and Safety

By: Enobong Udoh

At my practicum site at University of Texas, Environmental Health, and Safety Department, I was involved in respiratory fit testing of University of Texas incoming Medical Residents, Medical Student, and employees of the medical school. I was also involved in the annual biological, chemical, and radiation safety laboratory surveys of the various UT research laboratories. The final product of my practicum was the production of well informed Medical Residents and Students on proper respiratory protection method. In addition, the University of Texas laboratory employees and principal research investigators were updated on the current laboratory health and safety protocols.

Public Health Significance

The essential public health service that relates to my practicum experience is to inform, educate, and empower people about health issues. Specifically, respiratory fit testing of the UT Medical Residents, Students, and employees helped inform, educate, and empower them about the need for proper use of respiratory protection to prevent exposure to various environmental air toxicants. My host organization contributed to this public health project through the provision of NIOSH-Approved N95 Respirators and highly trained health and safety professionals as instructors and fit testers.

Special events/duties

- Respirator fit testing for University of Texas medical students and Residents
- Radiation safety training for University of Texas Environmental and Occupational Health and Safety summer interns
- Survey of University of Texas Research Laboratories

“Healthy employees equal happy employees equal high productivity.”

Safety signs

Animal hazard
Sharp instrument hazard
Heat hazard
Biological hazard
Chemical hazard
Electrical hazard
Eye & face hazard
Radiation hazard
Fire hazard
Explosion hazard

Respiratory safety

http://www/tpub.com/content/advancement/14145/cfa/14145_164.htm

NIOSH-Approved N95 Respirators


Surgical masks

Respiratory safety

http://www/tpub.com/content/advancement/14145/cfa/14145_164.htm
Project Saving Smiles: Protecting Second Graders' Oral Health
By: Kalpana Bhandari

Project Saving Smiles (PSS) is a community-based school dental sealant program implemented by the Houston Department of Health and Human Services that targets socio-economically disadvantaged children enrolled in the 2nd grade in schools within Houston.

During the school-year, at selected dates and locations, the project provides services, such as dental screening, dental sealant and varnish application, oral health education, and referral services free of charge.

Duties at PSS:
- Enter the school sealant data from the follow-up project 2009-2010 into the Database
- Compile and analyze the PSS data from 2008-2011
- Evaluate the effectiveness of timely prophylactic interventions

Public Health Significance

The PSS addresses some key Essential Public Health Services, specifically mobilizing community partnerships to identify and solve oral health problems. Also, this project informs, educates, and empowers people about oral health issues.

One of Healthy People 2020 objectives is to reduce dental caries, and to increase application of dental sealant. The main objectives of Project Saving Smiles are:

- decrease incidence of dental caries, and
- increase students' school attendance.

The PSS reaches out to the school communities with its services and addresses Healthy People 2020's targets.

http://www.houstontx.gov/health/saving_smiles.html

Oral Hygiene Tips:

- Brush with fluoride toothpaste after meals or at least twice each day
- Floss daily right before bedtime
- Visit a dentist regularly for cleanings and oral exams starting by the age of 1
- Eat a well-balanced diet
- Limit between-meal snacks, especially those sugar
- Drink plenty of tap water

"Tooth decay was a perennial national problem that meant a mouthful of silver for patients, and for dentists a pocketful of gold."

~Claudia Wallis

http://www.femaleparent.com/view/50160/5_Ways_to_Keep_Your_Kids_Teeth_Health
Infant Rib Fracture Study

Study of Rib Fracture & Non abuse causes in infant

By: Bibek Bista

During my practicum, I work in Harris County Medical Examiner Office. I started my practicum since May 2011 and intend to continue my practicum till the project is complete.

My topic is a research project to find whether cardiopulmonary resuscitation (CPR) and non abuse causes in infants is associated with rib fracture. There is strong evidence that infant with rib fracture may be victim of abuse, but non abuse cause such as CPR has not been fully investigated. This study explores role of non abuse cause of rib fracture.

My duties in the study involves participating in meeting regarding study design, perform data entry from medical record, aid data analysis and preparation of final report. The final product is research article to be submitted to peer-reviewed journal for publication.

Public Health Significance

My practicum project will help identify risk of rib fracture because of CPR and non abuse causes in infants.

The risk of rib fracture among infants who undergo CPR is largely unknown. Similarly the risk of rib fracture because of non abuse cause is largely unknown. So this study attempts to find presence of rib fracture among infants who undergo CPR or among infant with non abuse causes.

The result of this study will evaluate the potential hazard of CPR in causing rib fracture and injury to heart, lungs and other vital organs.

Finally the finding of this project will help evaluate whether we need to change present CPR protocol in infants or not.

Special events/
duties during your practicum

- Participation in meeting regarding discussion about study design, analysis method, report preparation
- observe autopsy procedure, forensic anthropology assessment
- perform data entry and data editing

What I learned in the practicum?

My practicum in research setting made me understand the importance of research in public health setting.

“If we knew what it was we were doing, it would not be called research, would it?”

- Einstein
Public Health Significance

The duties performed in my practicum setting primarily involved research, but also focused on three other Essential Services of Public Health, namely
- mobilizing community partnerships,
- informing, educating and empowering individuals, and
- linking people to needed health services.

The studies conducted in my department are partnerships between the Harris County Hospital District and M.D. Anderson Cancer Center as well as Kelsey-Seybold clinics and M.D. Anderson Cancer Center. By involving several institutions our effort to collect data and assess what type of interventions best fit the clinical setting are multiplied.

The smoking quitline study has enrolled tens of thousands of participants, encompassing the population-based approach of public health. Informing patients about the Texas quitline in a clinical setting allows for linking people to an extremely underutilized resource in a novel way, on a mass scale.

Increasing utilization of the Texas state smoking quitline through collaborative research

By: Amanda K. Brown, B.S.

My practicum focused on research about smoking cessation interventions and their implementation. Working with different research teams in the Department of Health Disparities Research at M.D. Anderson Cancer Center, I had an opportunity to assist in implementing research studies.

On the first project, my work was dedicated to training and supporting nurses in two different clinical settings (low and high socioeconomic status). These nurses were to ask patients about their smoking status and refer them to the hugely underutilized Texas state smoking quitline.

My duties on the other project involved going into the low socioeconomic status clinics to recruit smokers that are unmotivated to quit.

A community-based approach was taken in both studies, obtaining input and support from administrators in each clinical setting.

“Only 1% of smokers access the smoking quitline, a free counseling and treatment service. Provider-initiated access to the smoking quitline could increase access and treatment for smokers who may not have considered quitting before.”
Preventing Childhood Lead Poisoning

Helping Houston, One Home at a Time

By: Eric Chen

From June until August 2011, I had the hands-on opportunity to learn how to inspect houses for lead, from traditional to non-traditional sources. Lead has been a major problem in houses built before 1978, many of which still exist in the city today. Unfortunately, this heavy metal can cause severe developmental problems in children younger than the age of 6.

This environmental topic is one that the city of Houston takes very seriously, utilizing a variety of media and outreach programs to contact potential at risk families. By inspecting homes for elevated lead levels, and fixing those houses at no cost to the homeowner, the department makes a significant contribution in many lives.

Beyond helping inspections, I was able to evaluate currently accepted high risk ZIP codes, and identify new ones to better screen for this hazard.


definitions:

Lead Inspections and Home Visits around Houston

- Qualified homes for lead paint remediation
- Analyzed database for the city’s high risk ZIP codes
- Participated in Healthy Homes Training

Lead Inspections

- Qualified homes for lead paint remediation
- Analyzed database for the city’s high risk ZIP codes
- Participated in Healthy Homes Training

Public Health Significance

Lead inspections embody the principle, “diagnose and investigate health problems and health hazards in the community.” From physician to health department, the resources of the city were utilized to screen thousands of children to ensure the health of our future generations. When reports did come, the health department not only followed the child, but it also went to the family to identify the exposures that caused the child to fall ill.

One family I worked with experienced the consequences of their child eating lead paint chips. Decisive action on the part of the health department quickly allowed us to temporarily move the family, repaint and reseal the flaking walls, and renovate the home to make it safe for children to live. After evaluation and assessment of the remediation, it was deemed that all sources of lead had been removed. Countless other cases have benefited and will continue to benefit from this valuable public health service.
Nutrition and Prostate Cancer

Red Meat Consumption and Prostate Cancer in Mexican-American Men: A Literature Review

By: Paul Comish

Working at M.D. Anderson Cancer Center in the division of Epidemiology was extremely educational! This experience offered me the opportunity to conduct literature reviews in the area of nutrition and prostate cancer, analyze secondary data, attend weekly meetings and journal clubs, as well as become exposed to the realm of Public Health research. I now consider myself an expert in the area of prostate cancer, something I could have never predicted!

Prostate Cancer is the most diagnosed cancer in men behind melanoma, and is also one of the most treatable. Nutritional factors can play an influential role in the progression and incidence of this disease. I used my epidemiology and biostatistics to help accomplish my duties. My task was to search and explore the potential correlations between red meat and prostate cancer.

There is a growing concern about the role red meat plays in prostate cancer progression.

Reducing the number of incident prostate cancer cases within this community.

M.D. Anderson offers treatment and research for those suffering from all types of cancer, and has become the number one cancer hospital in the world! As a part of this organization, my project contributes to public health by providing knowledge about potential carcinogens and their influence in cancer progression.
Public Health Significance

This practicum experience fulfilled two of the essential services of Public Health: monitoring health status to identify community health problems and investigating health problems and health hazards in the community. The astronaut corps is a specific community with unique exposures in the austere environment of space.

As expeditions on the International Space Station and future missions beyond Earth’s orbit force astronauts and cosmonauts to spend extended periods of time in space, it is important to identify the potential health hazards that may result from their exposures.

Development of Occupational Exposure Questionnaire for the Lifetime Surveillance of Astronaut Health (LSAH)

By: Jenny Crittell

The LSAH began in 1992 as an epidemiological study to examine the incidence of acute and chronic morbidity and mortality of astronauts, in order to identify health-related problems that require space craft medical facilities and to devise and implement methods to reduce risk. The focus of the study has since evolved into occupational surveillance for the astronaut corps.

Although exposures for ground-based employees at JSC have been well characterized, specific exposures to the astronaut corps have not been as thoroughly tracked. My task was to develop an exposure history questionnaire to identify past exposures to which astronauts may have been exposed, both on the ground and while on-orbit. The information will be used to identify exposures that may have been unreported and to change the focus of annual medical exams from health maintenance to exposure-based surveillance.

Data from past missions was also examined, including incidents involving exposures to hazardous chemical or physical agents.

One of the challenges with this project is that many astronauts are prone to take greater risks than the general population, and health outcomes or exposures may go unreported.

Public Health Significance

"The conquest of space is worth the risk of life."

- Gus Grissom, died with astronauts Chaffee and White on January 27, 1967 on the launch pad during a test.
Establishing a Promotora Program with Clinica Esperanza

By: Krista Granger

Clinica Esperanza is a small clinic that makes a huge impact on the island of Roatan, where health care resources are limited. Public health services are even more scarce, so three other students and I were asked to set up a Promotora (aka Community Health Worker) Program that can address the public health needs of the island.

We started by conducting a needs assessment to determine the specific health needs of the island and the role of promotoras in each community.

From data collected, we found that promotoras would best serve their communities by teaching health education classes on disease prevention and treatment, water and sanitation, and maternal and child health.

Funding is an important part of sustaining the Promotora program, so a proposal was written to the local Rotary Club in hopes of receiving a grant.

Public Health Significance

The Essential Service of Public Health that most closely relates to my practicum experience is monitoring health status to identify community health problems. My classmates and I were able to travel to different communities across the island and administer our questionnaires. From the questionnaires, we were able to identify the most prominent community health problems that promotoras can work to address.

The goal of my practicum experience is to set up a sustainable Promotora Program that will contribute to the Essential Service of Public Health of informing, educating, and empowering people about health issues.

Promotoras are an essential part of the healthcare system in Roatan. They are able to reach a wide range of community members that may not otherwise have access to health education and clinic resources. Promotoras are also linked to healthcare professionals and are able to refer community members to receive further care when necessary.

Special events/ duties

- Conducting a needs assessment of the types of health services a Promotora should provide
- Creating a proposal for the Promotora Program
- Administering vision screenings and distributing glasses to primary school students
- Creating a curriculum guide for volunteers teaching health education classes at Clinica Esperanza

“We cannot live for ourselves alone. Our lives are connected by a thousand invisible threads, and along these sympathetic fibers, our actions run as causes and return to us as results.”

-Herman Melville
Summer at the CDC Dengue Branch in San Juan, Puerto Rico
By: ANNE HAUSE

For the past three months, I have worked as an intern at the Epidemiology Department of the CDC Dengue Branch. I moved to Puerto Rico in May and started work at the CDC almost immediately. For my project, I was assigned to describe the epidemiology of dengue in infants.

Before I could start the project, I performed a literature search on infant cases of dengue. The next step was to identify all cases of dengue that have occurred in Puerto Rico during the past 11 years in children 18 months or younger (approximately 3500).

Our preliminary findings indicate that Puerto Rico differs from other endemic countries in regards to the epidemiology of dengue in infants. The results of the study will be submitted to a peer reviewed journal in the spring.

I was invited to return to the Dengue Branch to expand my study and will do so in January. This additional study will examine the relationship between IgG levels and disease severity in infants.

Public Health Significance

The function of the CDC Dengue Branch is to assess the risk of dengue in Puerto Rico, as well as describe its impact. The Epidemiology Department, in particular, maintains dengue surveillance, trains and evaluates health care providers in clinical management, and describes the overall impact of dengue in Puerto Rico.

My role at the Dengue Branch addresses the “APHA Essential Public Health Service” subject of Research.

Dengue in the infant population of Puerto Rico has never been described in depth. It was my goal to investigate the epidemiology of this population and provide some insight into severe disease in infants. It is essential that physicians and health care providers be made aware of the complications of dengue in this population so they may recognize and treat disease early.
Hospital Violence within the St. Lukes Hospitals System

By: MEGAN HOLDERNESS

For my practicum, I worked with a fellow UTSPH student and professor for St. Lukes Episcopal Hospital. We collaborated with a team from Duke University to evaluate patient on worker violence at St. Lukes and Duke Hospitals. We created a blitz survey, phone interview survey, and walk through survey, as well as pilot tested each one. I also assisted with a systematic review on the subject. The walk through survey was conducted to assess physical barriers of the hospital; it is an ongoing survey that will be conducted periodically during the study. The blitz survey captures specific violent events. Workers that experienced a violent incident had the option to participate in a telephone survey, which would collect more detailed information. My practicum participation was a small aspect of the study, which is still being conducted through the upcoming years.

Public Health Significance

The safety of our health professionals is commonly overlooked—especially in regards to a patient causing the violence. Further, some hospital violence reporting systems are rather ineffective at capturing this information. Thus, this study aimed at identifying the main types of patient on worker violence and evaluate the physical environment at St. Luke’s and Duke Hospitals; this will also be compared to previous violence literature. The main goal is to create a more reliable and effective violence reporting system that aims to provide a safer environment for the worker.

Public Health Essentials:

- Develop policies and plans: This hospital violence study plans to create a more effective violence reporting system.
- Inform, educate, and empower: This study will bring better awareness of patient on worker violence to the workers so that they have a better opportunity at dealing with this workplace mayhem.

“It is time to bring awareness to the impact of hospital violence on hospital workers. We need to protect those whose job is to diligently save others.”
**Public Health Significance**

_Clostridium difficile_ Infection (CDI) is the most common nosocomial disease and the primary cause of antibiotic-associated diarrhea in the United States. There are around 400,000 cases of CDI annually, with a corresponding huge burden on the healthcare system. This area has a lot of scope for further research which helps for control and prevention of this infectious disease.

The practicum related to _C. difficile_ research addresses some of the elements of essential services of public health:

- **Monitor:** The research group conducts CDI surveillance by daily collecting all _C. difficile_ positive data from the center lab of the St. Luke’s Episcopal Hospital system.
- **Research:** Our _C. difficile_ research team is focusing on identifying risk factors, pathogenesis and effective treatment of CDI, and also to develop reliable and quickly method used for diagnosis of CDI.

**Special events/ duties during your practicum**

- Stool sample collection
- _C. difficile_ culture method
- Weekly _C. difficile_ research team meeting

“Rates of _Clostridium difficile_ infection and CDI-related mortality have been increasing since the 1990s...”

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**Clostridium difficile Research Team and Laboratory Practice**

**By: JAMIE HUANG**

During the practicum, I involved in lab-based _C. difficile_ research setting. We collected _C. difficile_ positive specimens from St. Luke’s Episcopal Hospital and stored them for future and on-going clinical and laboratory-based researches. I had the opportunity to participate in stool sample collection, bacterial culture methods, antibiotics susceptibility testing, and diagnostic techniques for identifying the strains of _C. difficile_.

Also, I attended the research group weekly meetings to keep track of the progress of the ongoing research and clinical trials going on within the _C. difficile_ research team and reviewed literatures about non- _C. difficile_ antibiotic-associated diarrhea which helps to develop a new research protocol.

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**Public Health Significance**

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MRSA Infection Control

Methicillin-Resistant Staphylococcus aureus screening and isolation: Is this an effective infection control strategy?

By: Zehra Hussain

I worked at the Central Texas Veterans Health Care System with the Infectious Disease and Infection Control departments as part of the MRSA initiative taken on by the VA. The prevalence of MRSA infections in hospitalized patients requires a special need for prevention.

The MRSA Bundle already implemented by the Central Texas Veterans Health Care System requires all newly admitted patients, floor-transfer patients, and discharge patients to have a nasal screening. This screening is then genotyped and the data is recorded. This initiative aims to further reduce MRSA transmission within the hospital.

Public Health Significance

American Public Health Association lists 10 Essential Public Health Services. Of these, I specifically had direct experience in Monitoring, Diagnosing/Investigating, and Researching during my practicum experience.

- The MRSA bundle initiative allowed me to experience how important surveillance is, in terms of hospital health and control of nosocomial diseases.

- Diagnosis and Investigation were a huge part of my practicum experience. We sought to find the specific source of MRSA infection for all patients included in the study. Until you know where the problem starts, you cannot fully appreciate or understand how to eliminate it.

- Research was the backbone of my work at the Veterans Health Hospital. Public health, and specifically hospital health, relies on continuous research and novel ideas for improvement. The MRSA project I worked on will continue to impact the VA in Temple, TX, but other hospitals as well.

Highlights:

- Texas Infectious Disease Society First Place Poster Presentation

A poster presentation of the abstract submitted to TIDS was my final product. This presentation refined my public speaking skills and gave me the experience of meeting professionals in the field of infectious disease.

“With proper identification of disease source, MRSA is preventable”
Depression and Cancer

Does depression impact survival and influence recurrence in head and neck and epithelial ovarian cancer?

By: Amit Jethanandani

To investigate the relationship between depressive symptomatology and time to recurrence or death in head and neck and epithelial ovarian cancer (EOC), I designed a retrospective data review of my mentor’s parent studies. Via UT-MDACC’s online medical record database, I abstracted patients’ baseline tumor characteristics and demographics from two IRB-approved data sets using schedules, forms, and spreadsheets that I had previously drafted. After I had completed all 597 abstractions, I sent the data to department biostatisticians for analysis.

Currently, analysis of the data is pending. I plan on presenting my findings at MD Anderson’s Annual Survivorship Conference, and I hope to submit a manuscript by December 2011. I will also host a brown bag (September 21st 12:00pm in MDACC’s Behavioral Science Conference Room) to meet my program’s educational requirements.

Public Health Significance

Research is the Public Health Essential Service (PHES) that most accurately reflects my practicum experience. This data review is the first of its kind: unique in its aims, large sample size, power, and generalizability. So, I feel as if I’ve offered new insights regarding the prevalence of recurrence in head and neck cancer patients.

I’ve also significantly contributed to public health in three areas: (1) by identifying bio-behavioral factors associated with cancer (2) by inspiring further etiological research in the field of psycho-oncology and (3) by encouraging clinical attention to the psychological needs of epithelial ovarian and head and neck cancer patients.

My host organization is the world’s leading cancer care hospital and provides the most effective treatment for a wide variety of ailments and conditions. MDACC services the public through individualized treatment, therapy, and follow-up as well as through educational programs, community outreaching, and dedicated research.
Public Health Significance

During my practicum experience, the significant health problems of the local community were introduced. As a group, we discussed contributing factors and current policies and interventions in place to respond to these health issues.

Of the 10 Essential Public Health Services, the two that most closely relate to my practicum experience are:

- Inform, educate, and empower people about health issues.
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable.

Prevention of mother-to-child transmission of HIV/AIDS involves the education of both mother and community. Mothers have free access to healthcare services, including ARV therapy. They receive education in several areas, including the risk of mixed feeds. Formula is provided to mothers that chose not to breastfeed. HIV-RNA testing of the infant is performed at 6 weeks.

HIV/AIDS Epidemic & Healthcare in post-apartheid South Africa

By: Katie Kimbrough

Child Family Health International (cfhi) is an NGO that collaborates with international sites to develop global health education programs for health science students.

The HIV/AIDS & Healthcare program is held in the Kwazulu-Natal province, the area most devastated by the HIV/AIDS epidemic. Program participants learn about the struggle of South African healthcare system to overcome social inequalities left by apartheid and compounded by the HIV/AIDS epidemic.

To understand the stratified structure of the district health system, participants rotate through the different levels of care, beginning with primary health clinics and progressing to district, regional, and tertiary hospitals.

Participants educate the community on HIV prevention. My area of focus was the prevention of mother-to-child transmission. My final project was an oral presentation on preventive practices during both the pre- and post-natal period.

“In the Kwazulu-Natal Province, the HIV prevalence among antenatal clinic attendees is estimated at 39.5%.”

Weekend Activities

- Go on Safari at Hluhluwe Umfolozi Game Reserve
- Take a Hippo & Croc Boat Cruise on St. Lucia Estuary
- Visit the Kwazulu-Natal Sharks Board and watch a shark dissection live.
- Hike the Drakensburg Mountains

Photos courtesy of Katie Kimbrough

Mother & baby white rhino at Hluhluwe Umfolozi Game Reserve.

Roadside tribute outside the Umlazi Township in Durban.
Breast cancer; markers to identify the targets....

Role of Cyclooxygenase-2 in aggressive human breast cancer
By: Ashutosh K. Lodhi

By 2010, the majority of approximately 1.5 million annual new cases of breast cancer will be diagnosed in women in countries with limited resources. Public health approaches to medical problems emphasize the importance of practical, limited toxicity and very inexpensive interventions.

Early detection of breast cancer using mammography, while effective, is a high-
technology, expensive approach. Public health perspectives thus suggest that many current “standard” approaches to breast cancer in western countries cannot help the majority of women in the world. Consideration of various tumor markers, efficacy and cost-efficacy data thus appear warranted in order to develop approaches and targeted as well as tailored therapies to effectively prevent, diagnose or treat it.

My role during this practicum under the mentorship of Dr. Anthony Lucci who is also the P.I. of this study and the faculty advisor Dr. Sheela V. Shama, was to prospectively collect the data on the newly enrolled patients, discuss the issues with the research data coordinator and mentors, and periodically analyses to seek for any significant findings and understanding its public health implications

Public Health Significance

The core values we follow and the essential public health services I cater and learnt through my experience were to:

1. **Evaluate** effectiveness and quality of personal health services and analyze our research findings.

2. **Inform, educate, and empower** people about health issues

3. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.

4. **Research** for new insights and innovative solutions to health problems.

MD Anderson Cancer center being the research-driven patient care and science. MD Anderson is Making Cancer History. With more over 90,000 people seeking the high-quality care here every year, this institute addresses one of the biggest public health terror which is breast cancer that can be prevented by primary prevention and research and thus has been a very good practicum opportunity. Living with the core values of caring, integrity and discovery here every department teamwork and inclusiveness, helps practice our values by creating environment of belief and assisting each other in identifying the problems they face every day in a community here in a fight against a common enemy and the biggest public health threat.
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To investigate these conditions, Dr. Fornage’s lab examined traits or conditions known or suspected to be associated with leukoaraiosis or TIV. Previously performed GWAS studies were also used to identify suspected associations. I performed the bioinformatic searches and data mining of this process to develop a database of candidate genes. Potential candidate genes will be followed up with GWAS studies.

**Public Health Significance**

The essential service of public health that best relates to my practicum experience is diagnosis and investigation. The Fornage lab takes chronic health conditions, such as leukoaraiosis and TIV, which are associated with chronic public health problems, such as Alzheimer’s disease, obesity, and type II diabetes, and investigates their impact upon the community.

My contribution to the project, data mining and bioinformatic searches, is an essential part of this process. To generate a research hypothesis, one first needs a place to start, such as the identification of a public health issue.

Chronic disease is an incredibly active area of research interest. With the work completed by Dr. Fornage and colleagues, the health community is better able to understand current public health issues on the genetic level. Initiating and completing studies such as these allows the health community to better understand the complex genetic associations between various common conditions and diseases present in the population. Breakthroughs in the genetics that cause disease will lead us to their cures.

**Practicum Highlights**

- Developing bioinformatic and data mining skills
- Identifying associations between complex genetic traits

Leukoaraiosis (white matter atrophy) of the brain, as visualized by CT (Smith: Stroke 2010).

The search for genes contributing to complex genetic diseases is immense. To accomplish this task, we must start small, then expand the search.
Public Health Significance

Burkitt lymphoma is a B-cell Non-Hodgkin lymphoma that is more common in children than adults. The tumor has a very rapid growth rate and has been linked to certain immunodeficiencies and to Epstein Barr virus. Burkitt lymphoma is endemic to Africa, where most of the tumors show the presence of Epstein Barr virus. In the U.S., Burkitt lymphoma is sporadic and not consistently related to the virus. The tumor is typically sensitive to chemotherapy and, with the exception of emergency situations, it usually does not require radiation therapy. The cure rate for Burkitt lymphoma in childhood is approximately 80%-90%.

The Essential Service of evaluating the effectiveness, accessibility, and quality of personal and population-based health services is what my practicum experience is most closely related to. Through Texas Children’s Hospital, I was able to help evaluate the factors involved in diagnosis and staging, the type of treatment administered, the success of treatment, and some of the latent effects of treatment. This research will contribute to the improvement of the quality of care provided at TCH.

A Review of Clinical experience of Burkitt Lymphoma Patients at Texas Children’s Hospital

By: BRIAUNA LOWERY

The goal was to describe the clinical features of Burkitt lymphoma patients treated at Texas Children’s Hospital and to compare institutional outcomes to published data, in order to ensure that the highest quality of care is being delivered to TCH patients. Through medical record abstraction and statistical analysis using Stata software, we are evaluating the demographic distribution of the patient population, prognostic factors, survival, and long-term complications of treatment in the patients treated at Texas Children’s Hospital.

Forty-one patients were included in the analysis- 9 were female (22%) and 32 were male (78%). This is a predominantly white (75%) and non-Hispanic (75%) population. The average age at diagnosis is 8.66 years old, median age at diagnosis is 8.33 years old, with a range of 2.08-18 years old at diagnosis. The demographic distribution seen in the TCH was consistent with national data. Five percent of the patients presented as Stage I, 18% as Stage II, 54% as Stage III, and 23% as Stage IV. Immunodeficiencies were present in 17.5% of the participants. Surprisingly, approximately 47% of patients were observed to have neurobehavioral changes during and post-treatment, including depression, dyslexia, anger, ADD/ADHD, anxiety, aggression.

“An ounce of prevention is worth a pound of cure.”
-Benjamin Franklin

Highlights/ duties during your practicum

- Some highlights were being able to observe potential trends in the data and getting to see the fruits of my labor.
- Performing medical record abstraction gave me an appreciation for established databases, as well as the great importance of accurate record keeping.

- Summer 2011 • Briauna Lowery • Texas Children’s Hospital • Burkitt Lymphoma
Investigation of Surgical Site Infections

“An outbreak to be or not to be...that is the question”

By: Lucila Marquez

This summer I worked with the Infection Control (IC) Department of Texas Children’s Hospital (TCH).

In the late spring of 2011, an increase in the baseline rate of surgical site infections was noted. The IC Department responded by performing an outbreak investigation.

A case was defined as an infection occurring within 30 days of the operation or within 1 year if there was foreign material in-situ. I participated in creating a line listing of surgical cases during the timeframe through review of medical records.

Staphylococcus aureus isolates were characterized through molecular methods.

Ultimately, there were no consistent associations between cases. Thus an outbreak was ruled out.

Public Health Significance

Many duties of the TCH IC Department are directly in accord with the 10 essential public health services. The most pertinent of these are 1) to monitor health status to identify community health problems, and 2) to diagnose and investigate health problems and health hazards in the community. The ‘community’ in this scenario is TCH.

The TCH IC Dept. monitors through routine surveillance of hospital-acquired infections including surgical site infections, catheter-associated bloodstream infections, amongst others. Surveillance directs the IC department to mobilize upon detecting changes from baseline.

The outbreak investigation performed in response to an increase in surgical site infections reflects an inquiry into health hazards in the ‘community’. A series of potential factors were investigated, including personnel, operating rooms, antibiotic prophylaxis, and surgical preparation.

“Surgical site infections are the second most common nosocomial infection in the US.”

“Staphylococcus aureus is the #1 pathogen isolated from surgical site infections.”

Events

- Increase in the baseline rate of surgical site infections
- Outbreak Investigation conducted
- Isolates submitted for molecular characterization
- Outbreak ruled out

Staphylococcus aureus growth on a blood agar plate.

http://aapredbook.aappublications.org/content/images/large/2009/1/123_102.jpeg
How the built environment affect child health?

By: Yuan Mei

During the whole practicum, I am working with Baylor College of Medicine, Department of Pediatrics who perform studies- part of National Children`s Study around Harris County. My major duty is compiling all academic articles related to built environment and child health, through which making a matrix listing study design, study location, inclusion criteria, data collection method, outcome measurement and built environment description and other variables. Built environment and children diseases caused by which is a hot topic recently. Hopefully, by conducting such a systematic review, we will have a deep understanding of this topic and the magnitude, methods, results of studies conducted currently.

Special events/ duties

- Highlighting all Mesh terms related to built environment and child health
- Acknowledging programs related to built environment and child health conducted by Houston Department of Health and Human Services

Public Health Significance

Monitor health status to identify community health problems.

Inform, educate, and empower people about health issues.

Research for new insights and innovative solutions to health problems

This literature review is the first step of conducting a study on a brand new topic. We discuss issues such as sample representativeness, response rates, significant level and so on. All the three public health essential service will be demonstrated only when we draw a completed picture of current studies on local, national, global level and create a systematic and comprehensive study. We seek to transform findings for a healthy living of next generation.

The solution to adult problems tomorrow depends on large measure upon how our children grow up today!
**Public Health Significance**

In recent years, the incidence of nosocomial *Clostridium difficile* infection (CDI) has increased despite all the hospital infection control measures. According to a study done in US veteran administration facility, the number of CDI cases per 1000 discharges has increased from 5.1 in year 1994 to 13.5 in 2004. Though, the reason is not well understood, it has been attributed to the emergence of hyper virulent strains and, to an increase in the resistance to the standard treatment therapy. This has resulted in more frequent and longer duration of hospitalizations along with the additional exposure to antibiotics. These factors contribute to an increase in monetary loss along with the decrease in the standard of living in already ill and debilitated hospitalized patients. It is therefore, very important to know more about the *Clostridium difficile* so that this cycle of transmission in the hospital settings can be broken.
Infectious Disease Eradication in Amazonian and Highland Ecuador

My Global Health and Epidemiology Practicum in Ecuador

By: Heather Murray

My practicum this summer was an 8 week infectious disease eradication program with Child and Family Health International. I followed 2 epidemiologists in Puyo and Salinas Ecuador in their pursuit to control and eventually eradicate vector-borne diseases in Ecuador. We spent most of our time doing field work in the community. For example, in Puyo, we spent five days walking to Shuar tribe centers in the jungle to vaccinate children and teach people about mosquito protection. We also traveled to individual houses in small jungle towns to destroy mosquito breeding areas and teach people about what they can do to prevent vector-borne diseases like Dengue Fever, Malaria and Chagas. My duties were primarily in public health education. I taught people about mosquito life cycles, how the microbes reproduce and are spread by mosquitos, the health effects of infection, and what they can do to prevent infection.

Public Health Significance

My project this summer focused on both monitoring the health status of the community and informing, educating and empowering people about health issues. Santa Elena is an area on the southern coast of Ecuador that suffers greatly from dog bites and rabies infections. We spent two weeks traveling to the different clinics in the area to inquire about any dog bites or cases of rabies. Once we had our information, we entered it into Excel to create easily read graphs and tables exhibiting the changes in rabies and dog bite incidences in the province every week since the start of the year. Once we had all of the information compiled, we presented public health Information sessions at the different clinics. We explained to communities how the rabies vaccination campaigns for dogs implemented over the past few months have in fact exhibited a significant decrease in both dog bites and rabies cases in the region. We then explained how they could help to even further reduce cases, and keep themselves safe in the future.

Highlights of my practicum:

• Hiked through the Amazon to vaccinate children in Shuar villages.
• Taught individuals about the dangers of and the prevention of mosquito-breeding sites in and around their homes.
• Assisted my mentor in a presentation on the decrease in incidence of Dengue cases in Paztaza Province, and rabies cases in Santa Elena Province.

“I am amazed by the innovation that arises when public health professionals have very limited access to the supplies and technology that we take for granted in the U.S.”

Heather hiking through the Amazon Jungle to vaccinate children in Shuar villages.
HIV and Pneumonia Vaccine

To assess the feasibility of the strategy of delaying Pneumococcal Polysaccharide Vaccine (PPV) in HIV-infected patients for the purpose of improved antibody response

By: Mahwish Mushtaq

Persons with HIV infection are highly susceptible to pneumococcal infections and there are recommendations to immunize these persons with 23-valent Pneumococcal Polysaccharide Vaccine (PPV). Some studies have shown that HIV-infected people respond better to PPV when they are on HIV treatment. We want to determine whether the strategy of delaying PPV in HIV-infected patients starting treatment is associated with better immune responses to PPV compared to the current strategy of immunizing at presentation and before treatment is started. We evaluated 49 patients from Michael E. DeBakey VA Medical Center and Thomas Street Clinic. These patients were randomized to receive placebo or PPV at the initial visit. At 12 month, they were given placebo or PPV depending upon what they had received earlier. Serum was collected at 0, 1, 6, 12 and 13 months. The specific IgG response to 5 serotypes (1, 3, 4, 6B, 23F) included in PPV was determined by ELISA. Out of 49 patients analyzed, 19 received PPV at first visit (immediate group) and 30 at 12 month (delayed group). No significant difference in antibody response was seen in delayed group compared to immediate group.

Public Health Significance

Infections caused by pneumococci are a major cause of morbidity and mortality all over the world and more so among HIV-infected people. Although immunocompromised people may not respond well to PPV, the risk of disease is great enough that any potential benefit from vaccination may make this intervention cost-effective. Likewise, any intervention to enhance responses to PPV among persons with HIV may have a public health impact. This project addresses an essential public health service such as immunization and helps to provide new insight and solutions to health problems. This study showed that in this population the strategy of delaying vaccination for the purpose of enhancing the immune response is not warranted as there was no difference between the two strategies in the response to vaccine and a number of patients were lost to follow-up during the course of the study.

Study objectives during practicum

• Literature review conducted to study the effect of PPV on HIV patients.
• Performed ELISA to determine IgG response to specific serotypes in PPV.
• Analyzed data to determine statistical significance.

“The risk of pneumococcal infection is 100 times greater in HIV-infected people than in other adults of similar age” (CDC-2010)

These figures show the IgG response to 5 serotypes included in PPV for immediate and delayed group. The post-vaccine IgG response was very low for both groups; no significant difference was seen in delayed group compared to immediate group.

(Source: Graphs created on the basis of actual data from the study)

This graph shows that the number of patients decreased as the study progressed and only 80% patients completed 12 month visit; approximately 20% patients were lost to follow-up.

(Source: Based on data from the follow-up visits for the study)
Brain Tumor Case Control Study

Identifying Genetic/Environmental Factors in Gliomas

By: Darryl Nousome

I completed my practicum as a research interviewer for MD Anderson Cancer Center under Dr. Melissa Bondy and Georgina Armstrong.

The Gliogene International Case Control Study is an international consortium of investigators attempting to recruit 6,000 glioma patients and 6,000 healthy controls to learn about the genetic and environmental factors in brain tumor development. I was specifically tasked with recruiting, consenting, interviewing and obtaining genetic information from controls.

The interviews contained information regarding medical and medication history, which would aid in assessing brain tumor development.

Over the course of the practicum, I was able to recruit, consent, and interview 50 control subjects. Also, I identified new locations to recruit potential subjects.

My practicum
• Developing interview/interpersonal skills was essential for this experience
• Recruiting visitors to MD Anderson resulted in subjects that were from around the world

Public Health Significance

Diagnose and investigate health problems and health hazards in the community

Because the burden attributable to cancer is so large, this practicum experience relates most to the Diagnose and Investigate Essential Service. As a student in Epidemiology, I had the opportunity to see how epidemiology is used to diagnose and investigate the burden that brain tumors have on populations. Also I was able to see how studies are conducted as a part of an institution—I was able to see how procedures are implemented and followed to ensure the best quality of data.

MD Anderson, as an institution, has the goal of eliminating cancer, which attributes to a large proportion of the mortality and morbidity burden in the world. Dr. Bondy, attempts to understand not only the burden of gliomas, and brain tumors, but also the disparities in health that exist across race/ethnicities (Mano a mano cohort ad ELLA studies) and also the burden of cancer that is carried in younger populations.

Hopefully, after this study is completed, more risk factors can be identified to possibly lead to prevention of brain tumors.

A glioblastoma tumor in the parietal lobe
http://www.mayfieldclinic.com/PE-Glioma.htm

We hope to better understand exposures that are associated with increased risk (like radiation)
http://www.mayfieldclinic.com/PE-Glioma.htm

I learned how studies are conducted as a part of an institution
Serious Side-Effects Post-Treatment

By: Takei Pipkins

Proton Cognitive Outcomes Group is a collaborative study between Texas Children’s Hospital and Baylor College of Medicine that aims to determine the likelihood and severity of post-treatment neuro-cognitive decline in pediatric patients less than 20 years old suffering from brain cancer. Through medical chart data abstraction and inpatient interviews, researchers seek to understand the reasons behind these risks to establish whether proton treatment might be a healthier and more advantageous choice for these individuals. I was in charge of developing a form that allowed researchers to record pertinent information. Unique skipping patterns and logic checks allow abstractors to rapidly bypass sections that are irrelevant, while ensuring a lack of error. At the study’s end, researchers will be able to compile every form to statistically analyze the data.

Public Health Significance

The Proton Cognitive Outcomes Group is related to the Essential Services of Public Health because it seeks to improve the quality of life children. The Public Health Essential Service that is most closely relates to my practicum is that of Research: the study investigates an innovative approach to cancer treatment (proton) to solve the problem of brain decline in pediatric patients.

Among the many accomplishments of TCH, one of the most renowned at the moment was the successful implantation of an artificial heart in a pediatric patient. TCH and BCM work closely to improve the survival outcome of pediatric cancer patients everywhere.

Highlights from the study:

- create a form database that captures information
- learn more about treatment results for kids

“Cancer Treatment Research for a Brighter Tomorrow!!

What we hope childhood will be like in the future for patients!

Courtesy of the Child Cancer Foundation 2010
Infection Control at Memorial Hermann Hospital, TMC.

By: Lauren Pokomo

During my summer practicum at Memorial Hermann Hospital I spent four weeks shadowing Infection Control Practitioners (ICPs) in their respective departments to learn the fundamentals of surveillance, education, and infection analysis.

After the initial shadowing period, I was given the opportunity to work on a research program of my own. I chose to evaluate an active surveillance program designed to discourage the spread of MRSA in the ICU. Upon admission to any adult ICU patients are tested to see if they carry Methicillin Resistant Staphylococcus aureus (MRSA) in their nose, and are put on contact isolation if they test positive. My final project is research abstract reflected a significant reduction in the proportion of MRSA infections in the ICU since the active surveillance intervention began.

Public Health Significance

My practicum experience encompasses all ten of the essential public health services. Surveillance, “calling” a hospital acquired infection, instituting new rules and regulations, working collaboratively with hospital employees, and participating in ongoing improvement and research projects are all a regular part of an infection control practitioner’s daily functions.

The public health essential service that most closely relates to my practicum experience is “evaluate.” I spent most of my time at my practicum site involved in a direct evaluation of an intervention to improve hospital patient care. This intervention and the infection control department aim to provide a safer hospital experience for the Houston community by protecting them from hospital acquired infections.

Special events/duties during your practicum

- Participated in hospital-wide infection control meeting
- Observed infection control practices in the surgical department
- Assisted with a handwashing improvement initiative

“When you can measure what you are speaking about, and express it in numbers, you know something about it.”

Lord Kelvin

Photo of MRSA colony

Source: CDC, 2010
http://www.cdc.gov/mrsa/definition/index.html

Health care professionals putting on gowns, gloves, and masks for a patient on contact isolation.

Public Health Significance

This project was a clear example of the evaluation aspect of public health. The Food Bank is providing health services by distributing food to those in need and educating them on various nutritional topics in an effort to prevent conditions such as malnutrition, obesity, heart disease, and diabetes. In order to ensure that the Food Bank is meeting its goals with this service, it is essential that participants are asked for feedback.

Thanks to their responses, program coordinators have evidence of the program’s success that will help them to secure more funding. They will also be able to see the areas in which the program can be improved and entertain suggestions as to how to expand and improve the service in terms of the type of food and nutrition education that is offered.
**Prevalence of vitamin D testing in patients with osteoporosis**

**By: Anshuman Sewda**

Under the expert guidance of Dr. Rianon, I collected data to find out the prevalence of serum vitamin D level testing and vitamin D deficiency in osteoporotic elderly patients who visited UT Family Medicine out-patient clinic between Jan 1, 2008 and Dec 31, 2010. The project is funded by Texas Academy of Family Physicians Foundation which is dedicated since the past 50 years to support scientific initiatives that improve the health of all Americans. I structured a data collection sheet on EpInfo after deciding the required variables to collect and closely examined the Electronic Medical Records of patients who were assessed for osteoporosis, hip fractures or menopause and recorded relevant personal and medical history including vitamin D test status. Upon verification of the collected information, STATA 11 is used for descriptive statistical analysis and reporting of results is in progress.

**Public Health Significance**

Elderly individuals suffer from a multitude of health problems due to reduced immunity, aging body organs, physiological and emotional stress due to loneliness and struggle for survival. Postmenopausal hormonal changes make the problem even more difficult to handle. Weakening of bones and disabling fractures bring further trauma and depression to the elderly men and women. It is well established that adequate vitamin D levels are essential for musculo-skeletal growth and increasing bone density, and it is important to evaluate if primary care physicians are giving enough importance to vitamin D testing and considering Vitamin D as an essential component in the treatment of osteoporotic patients.

Of the 10 Essential Services of Public Health my practicum involved evaluating the prevalence of vitamin D testing orders by primary care physicians and the prevalent vitamin D deficiency in an effort to find new solutions for preventing, treating a debilitating condition like osteoporosis and it was an effort to find a treatment regime with better prognosis.

**Special events/ duties**

- A great learning experience about American Electronic Medical Records system
- Brainstorming to come up with new research questions concerning elderly health problems
- Practiced epidemiological data collection and assimilation skills

“Osteoporotic fractures are a common cause of immobility, pain and depression in elderly individuals.”

**Images from:** www.santarosastrength.com and www.dreamstime.com

**Treasure Your Bones!**

Image from: www.thenutritionpost.com
Prevention of Esophageal Cancer

Using NSAIDs to prevent esophageal cancer
By: Sarah Tambra

My work involved analyzing whether common medicines, such as aspirin and ibuprofen, could be used to prevent esophageal cancer.

The Epidemiology department at MD Anderson collected data from cases and controls in order to determine if taking anti inflammatory medicines reduced the risk of developing cancer.

I had diverse roles in the project. Not only was I analyzing the already collected data, but I did follow up interviews with cases and controls, as well as worked in the laboratory genotyping blood samples from participants.

In the end, we hope to have a paper to publish, as well as a new approach for preventing esophageal cancer. However, we do not yet have findings to report, as the project is still ongoing.

Public Health Significance

The essential public health service that my practicum focused most closely on was #10 – research for new insights and innovative solutions to health problems. MD Anderson is committed to all types of prevention, from primary to tertiary, it even has an entire building dedicated to cancer prevention research!

Secondary prevention, in the form of screenings, is also a major focus at MD Anderson, along with treatment and management of cancer once a patient has developed the disease.

During my practicum, I feel that I have really been an integral part of research that could potentially make a difference for the thousands of people at high risk for esophageal cancer – it is the most common cause of cancer death in a number of underdeveloped nations! Hopefully our research continues to go well and the chemoprevention can be implemented!

Images courtesy of mdanderson.org
Public Health Significance

My practicum site deals solely with enforcing laws and ordinances set by the City of Houston and the State of Texas. These laws are in place to protect consumer health and safety. In food establishments, these ordinances focus on temperature control, proper food handling, food storage, cleanliness, and maintaining a continuous barrier against the outside environment. For swimming pools, safety equipment, signage, and chemical balance are checked during the inspection. Like any type of law enforcement, the public is not always cooperative and communication issues often arise. The need for these inspections will always be there.

Sources
This summer I completed my practicum as a research assistant for a formative research project of the National Children’s Study at Baylor College of Medicine. The National Children’s Study is a large, nationwide study aiming to develop a better understanding of the factors that affect child health and disease. I worked with a network of universities around the country to develop a recruitment and retention toolkit for future study centers to use in their efforts.

Public Health Significance

This formative research project addresses important issues in all research studies: recruitment and retention. These issues are significant because they help determine the success and generalizability of research findings. Recruitment and retention are important for the National Children’s Study because approximately 100,000 families will need to be followed for 21+ years. Many of these families will include populations traditionally deemed hard-to-reach, such as foreign-born women and fathers. If the National Children’s Study is successful, our country will develop a better understanding of the determinants of child health.

As part of this study, we conducted semi-structured interviews with staff members at two community based organizations (CBOs) in Houston. Interview topics related to recruitment and retention practices, as well as study center staff selection. Interviews, conducted in English and Spanish, were transcribed and are in the process of being coded and analyzed. My final products include a poster for APHA and a manuscript outline. These are still in progress, as the data are currently being evaluated.

"There is much more to successful research than what is learned in the classroom."

Practicum Highlights:
- Participating in semi-structured interviews with CBO staff as a scribe
- Developing a better understanding of coding qualitative data
- Interacting with a large network of public health professionals across the country through weekly conference calls and meetings
- Familiarizing myself with a public health research program, as well as the roles various professionals play in the process.

“Communication is key!”

Children will be followed from before birth until age 21.
The Summer Free Lunch Program

Public Health Significance

The Summer Food Program is a federally funded program from the United States Department of Agriculture (USDA). The mission of the program is to help children from low-income communities to have a nutritious meal while out of school (USDA, 2009). This practicum experience relates to Research as one of the Essential Services of Public Health. As the Summer Food program intends to help with the problem of food insecurity in the U.S. by providing children with nutritionally balanced meals, we wanted to assess the nutritional intake of these children and examine their food preferences.

Although the nutritional data analysis is not finished, we were able to identify several areas that could help to improve the delivery of the program.

Main Observations:

- There was little participation from the children of the community.
- Lunch period was too early and too short.
- Young children needed more time to eat.
- Chocolate milk was the most popular item on the menu.
- Participation might have been affected by the proximity of other organizations providing the free lunch program.

References:


Observations of the Summer Free Lunch Program at Pasadena ISD
By: Betty del Río Rodriguez, M.D.

The practicum objectives were to assess the nutritional intake and to learn about food preferences of children participating from the Summer Free Lunch Program.

We observed children during the lunch time at different schools in Pasadena and South Houston. We took data on items selected from the menu, how much they ate, exchanged with other children and wasted.

We observed at total of 304 children, 154 boys and 150 girls. Seventy five percent of children observed were from the Summer School program and the rest were children coming from the community with their parents.

Table 1

<table>
<thead>
<tr>
<th>Lunch Feeding Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
</tr>
<tr>
<td>Beef soft taco with cheese</td>
</tr>
<tr>
<td>Refried Beans</td>
</tr>
<tr>
<td>Spanish Rice</td>
</tr>
<tr>
<td>Chilled Peaches</td>
</tr>
<tr>
<td>Milk*</td>
</tr>
<tr>
<td>Tuesday</td>
</tr>
<tr>
<td>Chicken Nuggets or</td>
</tr>
<tr>
<td>Roasted Chicken</td>
</tr>
<tr>
<td>Dinner Roll</td>
</tr>
<tr>
<td>Mashed potatoes</td>
</tr>
<tr>
<td>Green Beans</td>
</tr>
<tr>
<td>Spiced apples</td>
</tr>
<tr>
<td>Milk*</td>
</tr>
<tr>
<td>Wednesday</td>
</tr>
<tr>
<td>Grilled Cheese Sandwich</td>
</tr>
<tr>
<td>Peas or Corn</td>
</tr>
<tr>
<td>Pear cup</td>
</tr>
<tr>
<td>Sugar or Chocolate Cookie</td>
</tr>
<tr>
<td>Milk*</td>
</tr>
<tr>
<td>Thursday</td>
</tr>
<tr>
<td>Cheeseburger</td>
</tr>
<tr>
<td>Baked French Fries</td>
</tr>
<tr>
<td>Pickle Spears</td>
</tr>
<tr>
<td>Rosy Applesauce</td>
</tr>
<tr>
<td>Milk*</td>
</tr>
</tbody>
</table>

*Milk options were 2%-fat white milk and fat-free chocolate milk

Table 2

<table>
<thead>
<tr>
<th>Schools Observed</th>
<th>Summer School</th>
<th>Community</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kruse Elementary</td>
<td>33</td>
<td>12</td>
<td>20</td>
<td>25</td>
<td>45</td>
</tr>
<tr>
<td>Richey Elementary</td>
<td>12</td>
<td>5</td>
<td>9</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Red Bluff</td>
<td>18</td>
<td>7</td>
<td>15</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Pomeroy Elem.</td>
<td>18</td>
<td>9</td>
<td>16</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td>Keller Middle</td>
<td>24</td>
<td>9</td>
<td>14</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>Southmore Inter.</td>
<td>0</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Bailey Elem.</td>
<td>4</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>South Belt</td>
<td>10</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Matthis**</td>
<td>29</td>
<td>8</td>
<td>16</td>
<td>21</td>
<td>37</td>
</tr>
<tr>
<td>Bondy</td>
<td>22</td>
<td>0</td>
<td>13</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Intermediate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schneider Middle</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Teague</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Meador**</td>
<td>27</td>
<td>0</td>
<td>12</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Laura Bush**</td>
<td>20</td>
<td>3</td>
<td>12</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>227</td>
<td>77</td>
<td>154</td>
<td>150</td>
<td>304</td>
</tr>
</tbody>
</table>

*Table is not representative of the total participation of children in the Free Lunch Program.
**Schools located in South Houston area.
Worksite Wellness at Shell

Promoting Health and Wellness to Employees at Shell

By: Mary Eckhardt

My practicum took place at Shell, where I worked as a worksite wellness coordinator intern. While there, I worked on various projects that promoted wellness to Shell employees.

One major part of my practicum was designing and implementing wellness challenges. These challenges are fun ways to encourage employees to participate in healthy behaviors. One specific challenge that I worked on was the TaCIT Grand Prix. In this racing-themed challenge, teams competed against each other by drinking water, exercising, and taking stress breaks. Completing these wellness activities earned “miles” that fueled each team’s race car around the track.

For my final product, I created a written summary of the TaCIT Grand Prix. This gives an overview of the challenge and will be helpful when the challenge is implemented again in the future.

Public Health Significance

My practicum experience was most closely related to the essential service of “inform, educate, and empower people about health issues”.

The main goal of the wellness department at Shell is to provide education to employees about health issues and also motivate and empower them to engage in healthy behaviors. Specifically, the wellness challenges I took part in provide education about health issues and also serve as motivation to participate in healthy behaviors. Information is also offered to employees through educational bulletin boards, presentations by local doctors and nurses on various health topics, and a wellness website.

Shell wellness contributes significantly to public health by providing health education and health promotion in the workplace. Work is an important part of life, and it is great to be able to reach people in this setting for the purpose of improving their health.

Practicum Duties

• Developed and implemented wellness challenges
• Created health-related, educational bulletin boards
• Worked on website development for wellness website.
Public Health Significance

When observing the 10 Essential Services of Public Health, the Houston Food Bank’s ability to “mobilize community partnerships that identify and solve health problems” has become a key component to their success. Although their services are limited to fighting hunger, the relationships in which they have established contribute to the overall wellbeing of the community.

A great example of their ability to mobilize community members can be viewed through their networking capabilities. Although some may feel ill equipped to lead the fight against hunger, the Houston Food Bank has created a web of community leaders that can synergistically produce $6 worth of food from every dollar donated. This not only benefits recipients of their services, but helps those within the web to be innovative in their approach.

Daily Activities at the Keegan Center

By: Zachary Fair

The general overview of my daily activities consisted of me helping with the preparation, cooking and packaging of USDA certified meals. My day typically started on the production line where meals for veterans, Kids Café and Meals on Wheels are package and distributed. The second half of the day was often a collaboration of tasks that were needed to facilitate cooking on future days.

Collectively, the tasks in which I performed helped to supply the 500 hunger relief agencies that work directly with the Houston Food Bank. Together, this relationship has allowed community stakeholders to channel their resources into a central location and produce a product that is then delivered by those who are the most invested within local neighborhoods.

Special events/ duties during your practicum

- Assisted volunteers with daily activities
- Prepared meals for children, veterans and the elderly
- Helped inmates increase their culinary knowledge

The Houston Food Bank distributes more than 65 million pounds of food each year to 18 counties in southeastern Texas.

Vision of the Houston Food Bank

http://endhungernetwork.org/our_service_area.aspx
Teen Pregnancy and STIs

This summer, I revised and implemented a behavioral intervention based on the study "It’s Your Game, Keep It Real" currently being implemented through the UTHSC Center for Health Promotion in Houston. I revised this study to make a condensed Spanish version of the sexual health education program appropriate for Honduran seventh graders. I implemented the intervention at a public school with 95 seventh graders in La Esperanza, Honduras in the region of Intibuca.

I began with a pre-test survey at an intervention and control school to test participants’ personal sexual experience; knowledge of STIs, pregnancy and effective birth control methods; and beliefs about initiation of sexual intercourse. Following the survey, I taught eight lessons regarding respect, healthy relationships, avoiding risky situations, how to say no, and methods for avoiding pregnancy and contractions of STIs at the intervention school.

The organization I worked for, Amigos de las Americas, is a non-profit organization that focuses on community development and health education. Although this was a special project not within their normal structure, they encouraged me to focus on connecting with the students and educating them on these issues to the best of my ability. The host site, the intervention school, also encouraged me to do the same. My main duties were developing, implementing, and evaluating this intervention.

Overall, the intervention went well in the development of the curriculum and implementation of the lessons. From observation and feedback, I can see the participants gained confidence in their ability to make good choices concerning risky situations. The final evaluation is currently being implemented, along with the post-test survey, and upon analysis, results will be shared with the intervention school, control school, and host organization.

Preventing Teen Pregnancy and STIs in Honduran Youth

By: Julia Fleckman

The organization I worked for, Amigos de las Americas, is a non-profit organization that focuses on community development and health education. Although this was a special project not within their normal structure, they encouraged me to focus on connecting with the students and educating them on these issues to the best of my ability. The host site, the intervention school, also encouraged me to do the same. My main duties were developing, implementing, and evaluating this intervention.

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From "Faces of Teen Pregnancy", multimedia exhibit presented by the Southcoast Hospitals’ RAPPP program

“I can see the participants gained confidence in their ability to make good choices concerning risky situations.”

Highlights of my practicum

- Connecting with participants to gain trust and confidence
- Giving participants the opportunity to develop decision-making skills
- Making an impact in the reduction of teen pregnancy and STIs in Honduran youth!
Worksite Wellness with Integrated Health Solutions @ BP
By: Haley Fox Amick

I held my practicum with Integrated Health Solutions, Inc., delivering worksite wellness services for BP at the Houston Westlake Campus. IHS incorporates nutrition, fitness, clinical & therapeutic health solutions, along with wellness staffing & consulting health services to enable employees to take charge of their own health, creating health improvements and cost savings for both the employee & the employer that are measurable & can be maintained over time.

The project in which I was most involved was organizing health screening results data into a format fit for presenting in Executive Summaries to be presented to Business Unit leadership at mid-year reviews. Condensing the data enables changes in health status to be seen from one year to the next, helping to measure the progress of the program initiatives.

Special events during my practicum
• Designed & helped present a physical activity presentation for employees participating in the “Biggest Loser” competition
• Participated in the Pedometer Challenge Kick-off @ BP Wind Energy Campus
• Observed biometric & resting metabolic rate screenings & consultations

“I learned that by helping employees take charge of their own health, companies & the employees will not only see health improvements, but cost savings as well.

Public Health Significance
My practicum experience in worksite wellness most relates to the 1st & 3rd of the Public Health Essential Services (PHES): (1) Monitor health status to identify community health problems & (2) Inform, educate, and empower people about health issues. The specific project I worked on, organizing health screening results data into a usable format, is a way of monitoring health status in order to determine progress and identify health problems in the work community. IHS utilizes multiple forms of screenings, such as biometric, resting metabolic rate, bone density, VO2 Max, and physical fitness screenings to monitor the health of employees. From analysis of this type of data, IHS can then decide how to best tailor their initiatives to inform, educate, and empower the company and their employees about how to take control of their own health, through a variety of programs such as healthy lifestyle workshops, nutrition seminars, onsite and virtual coaching, nutrition planning tools, grocery store tours, & one-on-one personalized lifestyle coaching.
Infection Control Internship and Focus Group Sessions

By: Jana Gurkin

My practicum was at Memorial Hermann Hospital in Infection Control. A large part of my learning came from shadowing and touring the hospital with infection control staff. Later on, I led focus groups on hand hygiene in the hospital for my project.

I am in the Health Promotion and Behavioral Sciences concentration, so I had an interest in doing my project in a non-clinical area, despite the fact that the infection control area hasn’t used a lot of behaviorally-driven work in the past.

My focus groups asked questions about ways to improve hand hygiene practices in the hospital, in order to reduce hospital-acquired infections. I conducted five focus groups, and then wrote a report of my findings for the staff to be able to use in their future programs.

Public Health Significance

The Essential Service that best represents the work in infection control is “diagnose and investigate health problems and health hazards in the community.”

Infection control works in many areas in the hospital in different ways, but they consistently try to investigate potential health hazards and disease outbreaks in the hospital.

They review lab test results and try to quickly identify, or diagnose, what viruses or bacteria a patient might have. They decide how to control the illness so the patient can get well without spreading it to others.

My focus groups investigated what factors might cause healthcare workers to be less compliant with hand hygiene in their work with patients. Improving the hospital environment so workers can develop better hand hygiene is an important method of keeping patients safe.
Public Health Significance

One of the 10 Essential Services of Public Health is to inform, educate, and empower. These are the same goals that RLRT and New Canaan are attempting to accomplish in the area of teenage sexuality.

Everyday our teenagers are bombarded with mixed messages about what is considered healthy sexuality through television, movies, music, and even the actions of the adults in their lives. With the vast number of messages the teens receive, many of them are extremely confused but are too embarrassed to seek help from those adults closest to them. By the same token, parents are too afraid to have those difficult conversations in an age appropriate manner with their young people. For this reason, by providing teenage sexuality workshops and parent focus groups, RLRT-New Canaan hopes to educate parents on what the research says is going on with most teens and empower them to address any necessary issues.

Real Life Real Talk: Teenage Sexuality at New Canaan Baptist Church

By: Brittanie D. Hazzard

The members of the New Canaan Baptist Church, along with the Real Life Real Talk-Houston coordinator Sonya Norsworthy, constructed a plan to implement Real Life Real Talk (RLRT) as a functioning ministry in the church.

RLRT is an initiative that focuses on empowering parents to have conversations with their young people about the components of healthy sexuality. RLRT seeks to bring parents, as well as other influential voices in the community, together to be a community support system in this endeavor to help teens become healthy adults.

In order to implement this ministry three meetings took place. The first meeting was with the pastor and the other two were focus groups with the members of the church. Through these meetings, we were able to gain a clear understanding of the vision the church had for this ministry.

“Parents have questions. Any forum that helps answer those questions or gives you a new direction for thinking is great.”

The New Canaan Members decided they would create two PSA’s. The first reminds teens that there is more to love than the physical attraction. The second reminds teens that there is no need to rush; they should stop and take the time to make healthy decisions.

Special events/

 duties during your practicum

- Original Public Service Announcements
- Analyzing Sex in the Media
- Remember when you were a teenager?
Therefore, my job was to simplify and repackage the information in this product in order for a lay audience to understand and apply the curriculum. I also assisted with the development phase of a weight management program, funded by the Cancer Prevention Research Institute of Texas (CPRIT), researching current weight management programs and transcribing audio of focus groups.

**Highlights**

- Shadowed interns and exercise physiologists at the Cooper Fitness Center and the Cooper Clinic
- Took Coaching Healthy Behaviors class and received Certificate of Completion
HIV/STD Prevention: AIDS Foundation Houston

HIV prevention in the context of essential services of Public Health
By: Chizoba Ifeorah

I worked on the HipHop for HIV project organized by the State Department of Health and Aids Foundation Houston. AIDS Foundation Houston played a significant role by providing educational resources, HIV and STD testing and conducting an awareness series.

My final product was a cohesive PowerPoint presentation detailing the programs of the agency and the ways it fulfills the core functions and essential

Public Health Significance

One of the essential services of public health is to inform, educate and empower people about health issues.

AFH through various programs such as Focus on Youth and VOICES serve to inform, educate and empower youth and adults. They are educated about HIV/STDs prevention, transmission and care. Conversation is encouraged between trained peers and their colleagues on these issues. Pamphlets, video and flyers are provided to community members who attend

Starting at the Greenspoint mall and spreading throughout various sites in the city, HipHop for HIV, 2011 led to the testing and screening of more than 2000 Houstonians.

I served as an educator after undergoing a comprehensive HIV/STD training course.

It was a great learning experience and also rewarding.

AIDS Foundation Houston also strives to stay abreast of new insights and innovative solutions to public health problems. They work directly with the Department of Health and ensure services provided by them are not only needed by the clients but also groundbreaking in terms of methodology.

Special events/ duties during your practicum

- Participating as an educator in HipHop for HIV, 2011
- Collation of data and data entry using Epiinfo software
- Preparation of packages for Camp Hope 2011
A quantitative and qualitative analysis of student satisfaction at UTSPH through end-of-semester course evaluations

By: Tiffany M. Jones

Through UTSPH's Office of Academic Affairs, I analyzed the course evaluation data at the end of each semester. The practicum provided the opportunity to analyze the quantitative and qualitative data using Excel, SAS, SPSS, Stata, and MPlus.

My public health topic was the training of future public health professionals through their satisfaction with courses at UTSPH.

Public Health Significance

The significance of the practicum is summarized through the PHES: "Assuring a competent public health and personal healthcare workforce".1

There is a need for public health professionals that are competent and can synthesize skills in the classroom to the real world. By understanding how the student perceives the course objectives and activities, how the student interacts with the course and instructor, how the student is assessed, and the materials and methods used, administrative decisions can be made to improve the course and/or the instructor.

UTSPH had formed a workgroup to understand instructor effectiveness and created a survey administered at the end of each semester to collect data on student satisfaction. I was responsible for data management and analysis.

The final product is a report including the qualitative and quantitative analyses of the survey data from Fall 2009 to Spring 2011.

"The extent to which we are able to address the complex challenges of the 21st century... depends, in large part, upon the quality and preparedness of our public health workforce, which, in turn, is dependent upon the relevance and quality of public health education and training."

--Institute of Medicine (2002).

Houston Region Food Assessment

Coalition Building for a Successful Regional Food Assessment
By: Louise Jordan

The mission of the Houston Food Policy Workgroup is to nurture the growth of a sustainable local food system, accessible to all, through education, collaboration, communication, and creation of a food policy council for the Houston region. From a public health standpoint, a healthy local food system can play a large part in ensuring healthy communities.

The Food Policy Workgroup is undertaking a 13-county regional food assessment that will shape and inform the formation and efforts of a local food policy council. Community involvement and resources are key to the implementation of a community food assessment. After identifying essential assessment team members, several meetings were held to define roles and resources, and team members committed to playing an active role in the assessment.

Additionally, in order to get a better idea of food system stakeholders and their potential role in assessment and policy efforts, a stakeholder survey was designed and distributed across food sectors. Data is still being gathered and analyzed; however findings will be presented in a report produced for the policy workgroup.

Public Health Significance

A large part of the practicum has been mobilizing community partnerships in order to perform the Houston Region Food Assessment, and then working together to tackle health issues like obesity and malnutrition after the assessment findings are gathered.

Solving health problems related to food security is where the Food Policy Council steps in. It is the hope of the workgroup that the larger assessment findings, as well as the stakeholder analysis, will provide a basis for Food Policy Council formation and efforts focusing on issues of importance identified in the assessment/analysis. These issues include urban farming, access to produce markets in disadvantaged neighborhoods, and more.

The workgroup supports several food-related policies that have been identified as important to the local food system and seeks to promote decision making that benefits the community health. It meets several times a year with rural and urban communities to discuss salient policy issues and encourage advocacy that advances healthy food policies. The community is also kept abreast of assessment and stakeholder analysis efforts through presentations and updates which were part of the practicum.

“...there are a few simple ingredients to collaboration. Community residents want access to healthy foods. Retailers and farmers need customers for revenue to sustain their businesses.” -HFHC, 2011

http://www.policylink.org/atf/cf/%7B97c6d55bb43-406d-a6d5-946f4a084d5a

Public Health Significance

Two important Public Health Essential Services were addressed by my project and are continuously addressed by the TMHS organization: (1) Informing, educating, and empowering individuals to understand health issues and (2) Linking employees to the services they need to prolong their health.

Through the Get In Step Pedometer Challenge, which I led, employees were educated on the importance of physical activity and empowered to take responsibility for increasing their fitness and activity levels. Additionally, through the information booth of summer safety, employees were informed about the importance of sun safety procedures and hydration, as well as links to alternative activity services offered by TMHS, as ways to safely improve their health through the summer months.

Lastly, through the health booth and the pedometer challenge, TMHS employees were linked to various services offered to them through the Employee Wellness Services department. One such service is a biometric screening, which is vital to understanding employee health status. Based on screening results, services are offered that fit an individual’s needs, from a nutrition consultation to a fitness assessment, or a wellness coaching session.

Worksite Wellness: “Stepping- Up” Employee Health

By: Katy Kenny

Employee wellness is vital to The Methodist Hospital System worksite. The health and wellness of employees are vital to the person and to the success of TMHS, in order to more effectively serve our community’s health needs.

Through my practicum I addressed the public health issues of increasing employee health awareness and increasing physical activity.

My primary project was implementing and maintaining an 8-week Get In Step Pedometer Challenge encouraging physical activity behaviors for over 2,000 employees. As the team leader, I organized all department data, encouraged employees, and sustained the challenge from its inception to the end.

My second project was to increase health awareness regarding summer safety. I researched the key issues, developed a promotional flyer, and manned a booth related to the topic to educate employees.

Walking is man’s best medicine.”
- Hippocrates

Special events/ duties

- Implemented and led worksite wellness pedometer challenge for 2,000+ employees
- Created and executed health booth on Summer Safety for employees
- Assisted in the development of nutritional health booth materials (research and flyer development)
- Provided personal wellness coaching sessions for employees
- Performed biometric health screenings (finger stick blood lipid panels, height, weight, waist & hip measurements) for over 30 employees

Me, Katy Kenny, at my Employee Wellness “Look’n’ Learn” Booth: Summer Safety (author’s photo).

Pedometer used during the “Get In Step” Department Pedometer Challenge (author’s photo).
Preventing Childhood Injury with Texas Children's Hospital

By: Jessica Knesek

My practicum was truly an enjoyable public health learning experience that focused on childhood injury prevention. I learned about the dangers of co-sleeping, home safety, child car seat safety, heat safety, and swimming safety. I was primarily involved with the Safe Kids program which is a local coalition made up of health & safety experts, educators, corporations, government agencies, and volunteers who come together to educate and protect families. The Safe Kids program focuses on safety programs in four main areas: Fire Safety, Water Safety, Pedestrian and Wheeled Sports Safety, and Child Passenger Safety (Car Seats). I participated with the child passenger safety team where I learned a great deal about car seat laws, recommendations, and safe practices while reaching out to the community to pass on my new knowledge.

Public Health Significance

My practicum experience related to several of the Essential Services of Public Health.

Inform, educate, and empower people about health issues, parents get educated about home safety and injury prevention, child passenger safety, shaken baby, and co-sleep dangers.

Mobilize community partnerships to identify and solve health problems, a variety of community alliances participate in childhood injury prevention such as the fire department, police department, child protective services, and TXDOT.

Link people to needed health services, there are plenty of resources available to parents.
Simple incentive for Education, Prevention & access

Outside in the hot humid Houston morning, youth are lined up while filling out papers, just waiting for the doors to open at Greenspoint Mall.

Doors open and slowly they file inside. A person in a red vest moves a group to registration while the rest wait. After group one is registered, they are escorted to phlebotomy to draw blood, then to urine analysis to pee in a cup, and then finally to education to learn about safe sexual habits and behaviors.

Behind the scenes, the blood is processed with in 60 minutes for HIV and syphilis results. Processing for chlamydia and gonorrhea results will take a few days.

After the education class, the group waits for another 15 to 90 minutes to hear their unique ID called out. Every time a number is called, patients look at their wristbands, hoping it is their turn to go to the unknown with a stranger in a blue vest.

Behind the black curtain, each patient is taken into a tiny patient room usually used as a dressing room. The person in blue discloses the anticipated status, answers questions and eases the patient’s concerns. Lastly each patient receives a bag of condoms, information and the ultimate reward -- the concert ticket.

Actually the ultimate reward is knowing your status, but we know that actually getting tested and waiting four hours can be a tedious process. So, a free concert of your favorite artists is a huge incentive that helps our youth stay healthy.

This is the new public health intervention!

Getting a taste of City of Houston HIV/STD Bureau

By: Arielle Kowenski

I walked into the Bureau on my first day and I became all things Hip Hop. Less than three weeks and many planning meetings later, this immense HIV/STD intervention was about to kick off.

Hip Hop for HIV is a month long event, that provides free HIV, syphilis, gonorrhea and chlamydia testing and education everyday.

My responsibilities for the event included: gathering volunteers for the largest testing site: Greenspoint mall, creating two promotional posters to grab the attention of volunteers, and taking charge of social marketing – facebook, twitter, and the website- to keep volunteers and youth up to date.

Being part of this intervention helped me understand what public health is and should be!

Simple incentive for Education, Prevention & access

Spring 2011 • Arielle Kowenski • HIV/STD Bureau City of Houston • Youth & HIV
Get Started Girl

Facilitation of a Health Education Program for Women Recently Released from Criminal Justice Settings

By: Carey E. Lusk

Get Started Girl is a health education program for women who are recently released from criminal justice settings.

Group sessions are conducted at a local parole office and a transitional housing facility.

Every week for 4-6 weeks, participants take part in activities and discussions designed to increase health knowledge and build self-esteem.

Public Health Significance

Of the 10 Essential Public Health Services, AFH informs, educates, and empowers people about health issues (3), mobilizes community partnerships to identify and solve health problems (4), and links people to needed personal health services and assures the provision of health care when otherwise unavailable (7).

Get Started Girl is an excellent demonstration of Essential Public Health Services #3 and #7. This program equips women with the knowledge they need to make informed decisions about their physical health and emotional well-being through education and empowerment and offers referrals to partner agencies for all manner of health, mental health, and social services.

Part of the curriculum focuses on dealing with past trauma and abuse to encourage emotional healing, self-acceptance, personal growth, and improved decision making in the future.

My final product for this practicum experience is a written report detailing how AFH functions as a community organization and how Get Started Girl is facilitated and evaluated for effectiveness.

Hip Hop for HIV

- The largest mass HIV testing event in the world!
- Young adults test for HIV and other STDs at various locations in Houston throughout the month of July
- Get tested, learn status, and get a FREE ticket to a Hip Hop concert!

“AFH collaborates with more than 100 community agencies to provide HIV outreach, education, and service.”

-AFH Website

Spring 2010 ● Carey E. Lusk ● AIDS Foundation Houston ● Health Education
Mapping Heroin Users in Tanzania

By: HARUKA MARUYAMA

I was in Dar es Salaam this summer as part of the Tanzania AIDS Prevention Program (TAPP). TAPP is a multi-arm program that seeks to help injecting drug users (IDUs) in Dar es Salaam. Some examples of what they do include: collecting and assessing health data on IDUs, connecting users to health services (such as mobile VCT services and a newly opened methadone clinic), and conducting community education programs in HIV/AIDS prevention and other harm reduction activities.

The purpose of this mapping activity was to find out where the hangout locations were and know more about current users’ experiences, so we can develop and integrate interventions in the future. My findings were presented in a final report and data table.

“TAPP is a program that encompasses all of the essential services of public health, and some examples include:

- Linking injecting drug users to methadone treatment and other health services
- Mobilizing partnerships with community-based and non-governmental organizations
- Training and monitoring outreach workers
- Educating people on issues such as HIV/AIDS and testing services

My practicum involved using a GPS device to map sites where heroin use occurred in all three districts of Dar es Salaam. Additionally, my colleagues and I interviewed groups of drug users at the sites to learn more about their lives, experiences, and needs.

The purpose of this mapping activity was to find out where the hangout locations were and know more about current users’ experiences, so we can develop and integrate interventions in the future. My findings were presented in a final report and data table.

“‘We want to quit using and we need help.’
- Every drug user we talked to

Highlights/Results
- Met numerous recovering heroin addicts who were in the methadone program and proudly showing us their ID badges
- Mapped a total of 106 locations over a five week period
- Met a total of over 850 drug users at the mapped sites, out of which 59 stated they were injectors

Mapping and interviewing heroin users in Dar es Salaam, Tanzania

Standing next to a TAPP vehicle, ready to go mapping!
Houston Food Environments

Assessing Urban food environments in Houston, TX using the Texas Nutrition Environment Assessment tool (TxNEA)

This practicum experience involved working in several communities in Houston, TX. Using the TxNEA audit tool, food stores in several communities were assessed based on the availability, cost and quality of fresh food. Data was collected and entered to be used in future studies used to develop interventions aimed at improving access to fresh foods. The difference in ethnic composition of communities provided a means to understand the characteristics of each community respectively. Such insight allows for the development of interventions appropriate to a particular community.

If the nation is to address public health issues related to diet, understanding and changing food environments must be part of the solution.

Public Health Significance

Assisting with a non-profit organization that collaborates with schools and parents in communities to inform, educate and empower provides an avenue for sustainable change in a community to improve the health of its members.

Research is needed to quantitatively measure characteristics of the neighborhood food environment and to qualitatively measure psychosocial aspects of residents and determine associations. Such research is vital in informing policy-makers and local officials in developing interventions and policies.

In addition, a concern for the health of minority groups in this area of study addresses the growing issue of health disparities that exist in the United States.

Analysis of food environments is directed on a path towards primary prevention of many of the most common chronic diseases our country faces.

Special events/duties during your practicum

- Exposure to various food environments in Houston
- Develop potential interventions/policies in communities
- Understanding the different roles food stores have in communities

“It was interesting to discover that residing in a community due to economic or personal preference effects what type of food environment you will live in.”

Image courtesy of www.hankinsonnd.com
Physical Activity in Magnolia Park

Connecting the Dots - Getting Resources to the Community

By: Lisa McManus

During my practicum, I worked with a nonprofit organization called Children And Neighbors Defeat Obesity (CAN DO Houston) to explore existing physical activity opportunities in the Magnolia Park area of Houston, TX. My role included extensive field work and networking with key informants to create a database of opportunities available to children and adults. While community partners have requested access to my findings to share with their clients, I will continue my work with CAN DO Houston to conduct focus groups with residents to learn about their preferred method of direct dissemination.

In addition to the physical activity opportunities database, I organized an introductory physical activity event at Mason Park. This free event showcased various activities available to residents including soccer, karate, volleyball, and basketball. It was a great time!

Public Health Significance

Obesity and overweight plague about two-thirds of children and adults living in the United States. Research has demonstrated an association between these chronic conditions and physical inactivity. Studies have also shown that regular participation in physical activity can help individuals maintain or attain a healthy weight/body mass index, especially when coupled with sound nutrition. By connecting residents with available physical activity opportunities, CAN DO Houston facilities making healthy choices in the community. To that end, my practicum work has addressed two

Essential Services of Public Health:

- Inform, educate, and empower people about health issues.
- Mobilize community partnerships to identify and solve health problems.

By increasing awareness of physical activity opportunities and engaging the interest of and commitment from community partners, we are taking steps to improve the health of Magnolia Park residents.

Many thanks to CAN DO Houston for an enjoyable and educational practicum experience!
Public Health Significance

In carrying out the national survey among domestic workers in Houston, it quickly became apparent how poor working conditions negatively affect not only the health of the domestic workers themselves but also of their families. For this reason the essential public health service that best describes the aims of the survey is to: 

**Diagnose and investigate** health problems and health hazards in the community. In this case specifically, problems related to labor conditions.

The results from this survey will be used to develop and promote trainings and campaigns that will help improve the working and living conditions of domestic workers which in turn will improve their health. However, the first step is to understand exactly what those working conditions are, which is why the survey is so important.

HIWJ works to improve the quality of life for low-wage workers through their efforts and by combating wage theft. This impacts their health and that of their families and communities.

Domestic Worker Survey Coordinator

This summer I collaborated with the NDWA, and HIWJ to coordinate a survey in Houston to better understand the working conditions faced by domestic workers. This is part of a national survey that is being conducted in 13 cities across the United States. The survey will help provide the background needed to pass federal legislation to protect domestic workers and has also been an opportunity to reach out and organize domestic workers in Houston. By organizing the workers we hope to offer them a place of support so they can mobilize and better their working conditions which in turn will improve their health.

As survey coordinator I trained surveyors, followed up with surveyors, tracked progress of the survey and reported back to NDWA. I also had the opportunity to survey various domestic workers and learned a lot about their working conditions.

National Domestic Workers Alliance (NDWA) Survey Coordinator

By: Daniela Monterrubio

The results from this survey will be used to develop and promote trainings and campaigns that will help improve the working and living conditions of domestic workers which in turn will improve their health. However, the first step is to understand exactly what those working conditions are, which is why the survey is so important.

HIWJ works to improve the quality of life for low-wage workers through their efforts and by combating wage theft. This impacts their health and that of their families and communities.

“Work is the immediate expression of the human personality and must not be regarded as a mere commodity.”

Pope John XXIII

The Houston Interfaith Worker Justice Center is a safe space for low-wage workers to learn about their rights in the workplace, and organize to improve working conditions on the job.
Increasing Awareness about Sexually Transmitted Disease

Hip Hop for HIV Awareness Campaign

By: Nantsiyi Bahati Mutima

This summer I completed my practicum with AIDS Foundation Houston in Prevention Services Department. Prevention Services conducted several programs such as Focus on Youth with Impact that provided sexual education and free testing of sexually transmitted disease (STD) to populations that have moderate to high risk of STD transmission. They also participated in the 4th Annual Hip Hop for HIV Awareness Campaign.

Hip Hop for HIV was a community outreach event created by AIDS Foundation Houston, 97.9 The Box, Houston Department of Health & Human Services, et. al. that addressed the transmission of STDs in Houston through various planned interventions. This event provided 8,000 youths and young adults with free HIV/STD testing, sexual education, STD results and treatment as needed. They also provided Volunteers and participants who completed the event with a free ticket to the Hip Hop Concert which took place Saturday July 30, 2011 at Reliant Stadium.

As part of my practicum I completed training for Focus on Youth with Impact program to learn how to facilitate programs. I also assembled condom packages for the event, created promotional items (flyers, pamphlet, poster) and I set up a recruitment table at UTHSC-Houston School of Public Health to recruit volunteers for the Awareness Campaign. Furthermore, I participated in the campaign by facilitating the Education component of Hip Hop and I helped out with other areas of the campaign as needed.

Public Health Significance

My practicum addressed several Essential Services of Public Health. The most significant services that were closely followed by my practicum include: diagnose and investigate health problems; inform, educate & empower people; link people to needed personal Health Services; and mobilize community partnerships.

Increasing awareness about STD transmission in Houston is significant because there is a high prevalence of STDs among youth and young adults in the City of Houston. According to Houston Department of Health & Human Services, “76% of all Gonorrhea and Chlamydia infections in Houston occur among 15-24 yrs olds, while 75% of reported HIV infections between ages 13-19 are African American”

As one of the greatest testing events in the nation, the Hip Hop for HIV Awareness Campaign tries to prevent transmission of STDs by increasing awareness of HIV & STD transmission through testing, education, treatment & incentives such as the Hip Hop Concert.

The results of this event can be used to empower youths & young adults in the community by allowing them to know their status and prevent further HIV/STD transmission. It can also be used to improve program components, create community partnerships and similar testing events in other cities throughout the nation.

To obtain more information about this event or to participate in the 2012 Hip Hop for HIV Awareness Campaign please check out: www.hiphopforhiv.com
**Can music therapy decrease depression and aggression?**

**By: Alexis D Offner**

I worked at Lexington Place, an assisted living facility in Houston, Texas. I assessed the music therapy pilot program in the dementia ward to see if the therapy was decreasing the residents' depression and aggression. I interviewed residents to determine their level of depression using the Cornell Scale for Depression and I interviewed a Certified Nursing Assistant using the RAGE Scale to assess aggression in the residents.

Half-way through my practicum, the president of Lexington Place authorized the launch of music therapy for all residents in the dementia ward, which was quite exciting! Now everyone in the ward can reap the benefits of music therapy.

My final product was an abstract for the pilot study, which I submitted to Coro Health, the company that runs the music program.

**Public Health Significance**

My practicum experience involved evaluating the effectiveness of an innovative public health program, specifically the music therapy program for the dementia ward. I assessed the depression status and the aggression status of every participating resident after the end of the pilot program to determine if the residents who had received music therapy had decreased depression and aggression. I determined that while there was decreased depression among the residents who received music therapy, this result was not scientifically significant. The clinical significance of this result, however, remains strong and provides hope for the future of music therapy at Lexington Place, especially since the music therapy program was approved for the entire dementia ward. Conversely, I found that aggression had increased among the residents that received music therapy, but this result was also not scientifically significant.
HIV issues in Ghana: stigma, discrimination, and the economic impact on families

By: Rebecca Poku

During my practicum, I worked at the Institute for Statistical, Social and Economic Research (ISSER) at the University of Ghana in Accra. The project I worked on was a cross-sectional survey conducted among people living with HIV in various areas of Ghana. The interviews were conducted before my arrival in Ghana; my job was to assist the researchers with analyzing the data and developing manuscripts to publish their findings. My final products were a draft of one manuscript and two abstracts that were submitted for an upcoming conference.

The manuscript draft that was completed covered the findings pertaining to HIV-related stigma and discrimination in Ghana. The data from the study will be further analyzed to investigate the economic impact of HIV on households in Ghana.

Public Health Significance

One Essential Service of Public Health that relates to my practicum experience is to “diagnose and investigate health problems and hazards in the community.” The results of the survey highlight several social issues that can affect the health of people living with HIV (PLHIV) and their families.

For example, the survey results indicate that, compared to previous reports, married PLHIV are disclosing their HIV status to their spouses more quickly. However, PLHIV continue to be very hesitant to disclose their status to more than 1 or 2 family members; this may indicate that more work is needed to reduce discriminatory attitudes among community members. Increases in HIV treatment seeking, HIV prevention behaviors, and community cohesion could result from decreases in HIV stigma.

The mission of ISSER includes both teaching and researching topics and skills that are critical in Ghana’s development and the socio-economic wellbeing of the people. As health is affected by the economic and social situations of a country, the work of ISSER contributes to public health in Ghana.

Non-HIV related practicum highlights:

- Western region trip to investigate corporate social responsibility of oil and mining companies
- Students heard from companies and affected community members
- Lesson learned: Public health issues commonly arise from decisions that are often not considered to be health related, such as community relocation and use of land.

“People living with HIV are just like you”

- Final sentence of a current anti-stigma message stated in TV, radio, and billboard messages in Ghana

ISSER emblem on a mug that was used a lot during my practicum...hence the slight fading of the emblem!
A Needs Assessment for Head and Neck Cancer Survivors

By: Martha Portwood

I completed my practicum this summer in the Department of Head and Neck Surgery at MD Anderson Cancer Center. My assignment was to develop a preliminary survivorship survey for head and neck cancer (HNC) survivors. The survey was developed using a theory-based logic model which identified relevant health problems, quality of life issues, behavioral and environmental factors, and psychosocial determinants of behaviors in HNC survivors. In the process of creating this survey, I used a systematic approach to identify existing items or to draft potential survey items using information from the logic model. The data generated from the dissemination of the survey will ultimately be used to inform the development of an evidence-based intervention which will address self-management behaviors in HNC survivors.

Public Health Significance

Traditionally, public health efforts have addressed cancer through early detection, behavior change, and cancer control. Such public health initiatives, along with advancements in clinical care, have resulted in a growing number of cancer survivors. Unfortunately, these survivors are often plagued with a plethora of treatment-related side-effects which can reduce their quality of life. HNC survivors are no exception to this finding. In fact, HNC survivors are more often burdened by treatment-related toxicities compared to other cancer survivors. For this reason, public health interventions addressing this population are needed. Because current estimates of the prevalence of delayed-onset treatment-related toxicities in this population are lacking, a needs assessment documenting these numbers was needed and was the focus of my practicum. Thus, the Essential Service of Public Health that most closely relates to my practicum experience is to monitor the health status to identify and solve community health problems.
HIV Testing Needs Assessments to PMTCT in Iganga District, Uganda

By: Sha’Tia Safford

During my practicum, I traveled to Iganga District, Uganda to volunteer for a non-profit organization called Safe Mothers, Safe Babies. My practicum began on July 19th and will conclude on August 20th. Safe Mothers, Safe Babies’ main objective is to reduce maternal mortality in the Kalulu area in Uganda. During my practicum, I was able to conduct 30 home to home visits with local women asking questions regarding HIV testing during recent antenatal care visits; speak with the two health centers (HCs) that the women would be attending, and speak to local advocacy groups concerned with Prevention of Mother to Child transmission (PMTCT) of HIV. At the conclusion of my practicum, I will create a report of the ramifications associated with not HIV testing pregnant women before birth in an environment where the HIV incidence and prevalence is very high. Safe Mothers, Safe Babies will use this report to find ways to advocate for the people in Kalulu to inform the government that they need to send more supplies to the rural village HCs to PMTCT of HIV. My results showed that government run hospitals and HC centers lack the supplies needed to administer HIV test; therefore contributing to an increase in the cases of mother to child transmission of HIV and an increase in the mortality of infants. The Ugandan government needs to provide HIV testing for mothers during antenatal visits if it is a requirement by law that women be HIV tested if they attend antenatal visits.

Public Health Significance

The core essential of public health that I feel like I needed to use to carry out my practicum was mobilizing the community. For example, in order to actually conduct home to home visits I had to ask the community if they felt comfortable with me asking them personal questions concerning their HIV testing and antenatal visits information. I also had to mobilize the community to allow me to also go into their health centers to ask questions concerning way they were treated a certain way or not given HIV testing during antenatal visits. Mobilizing the community allowed me to get access to some of their most valued figures within their community to begin to think about how Safe Mothers, Safe Babies can help them figure out how to improve their HCs so they can get the proper treatment.
Dementia Caregiver Stress

Talking to Dementia Caregivers about the Challenges They Face

By: Katherine Olson Scott

The purpose of my practicum was to engage caregivers of people with dementia in conversations about what they perceive as the most difficult challenges in their lives. Through collaboration with the University of Texas College of Nursing at Tyler and the Alzheimer’s Association, we established a stakeholder workgroup of eldercare service professionals to identify key caregiver populations at high risk for emotional and physical health issues.

After identifying caregivers of people with dementia as the target population, we chose to speak with the caregivers themselves. Under the guidance of my community preceptor, I was responsible for recruitment of focus group participants and design of focus group schedule and questions. I also conducted each focus group and analyzed the data collected.

“<I wasn’t prepared to have a second full time job.”<

~Caregiver of a person with dementia

Public Health Significance

In 2009, there were over 11 million people caring for people with dementia in the United States (Alzheimer’s Association, 2010). According to the Centers for Disease Control and Prevention (2011), the population of caregivers is expected to increase by 85% by 2050 given that number of people diagnosed with a form of dementia will increase to 16 million (Alzheimer’s Association, 2010). Given the ever growing number of caregivers, understanding their needs is essential to the public as a whole.

My practicum encompassed the public health essential services of monitoring, and partly diagnosing, and investigating the common health problems associated with caregiving for people with dementia. Through the community stakeholder workgroup and the focus groups, I was able to identify the key health issues associated with caregiving and to begin assessment of these issues. Through these interactions, I learned what the community sees as concerns and what they want to have addressed.

Primary Responsibilities

- Establishment of professional stakeholder workgroup
- Design and implementation of focus groups comprised of caregivers
- Analysis of focus group data

Summer 2011 • Katherine Olson Scott • University of Texas College of Nursing at Tyler • Caregiver Stress
Co-sleeping Becoming a Growing Problem in Child Deaths

By: Andria Stevens

This summer, I worked as a coordinator for the Houston/ Harris County Child Fatality Review team. One of the most important aspects of my job was to gather cases from different agencies for the team to review each month.

There are 6 main categories of Child death: natural, homicide, suicide, accident, child abuse, and undetermined. A growing trend in child death in co-sleeping. Co-sleeping is defined as any infant or small child sleeping on the same surface as any adult. Over the years, as many as 25-90% of parent have reported sleeping in the same bed as their child at one time or another. Co-sleeping is a controversial topic among pediatricians and health official.

According to the Houston Department of Health, there were 6.1 per 1,000 infant deaths in 2010. It is projected that 20% of these deaths are due to co-sleeping accidents.

Public Health Significance

The Houston/ Harris County Child Fatality Review (HHCFRT) team as an invested interest in reviewing preventable child deaths. By reviewing child death cases it is our goal to educate families and communities so our child can have healthy and safe futures.

Co-sleeping has become a significant public health problem across America. It is the 4th leading cause of preventable death in children under the age of one year old. In 2010, HHCFRT reviewed 259 child death cases; more than 50% of these cases were from natural deaths. Last year, 20 cases were resulting from co-sleeping- 80% of these cases were reviewed.

During the review process, our interdisciplinary team makes recommendations to ensure child health and safety and work to identify risk factors and barriers.

To learn more about child fatality, please visit our website at http://www.hcphes.org/dccp/Epidemiology/child_fatalit_review_team/child.htm
Clean Births in Uganda

Promotion and Distribution of Safe Mama Kits in Iganga District

By: Monika Tomczuk

Safe Mothers, Safe Babies (SAFE) is an organization working in Uganda to educate and mobilize the communities in Iganga District to be proactive about health issues in the area, particularly maternal and child health. SAFE received a grant to provide Safe Mama Kits to the area. Safe Mama Kits consist of supplies that help women have clean deliveries in low resource areas.

Working with SAFE, I developed a path plan for distributing the kits in the area.

Public Health Significance

My practicum with Safe Mothers, Safe Babies focused on the public health essential services of informing, educating and empowering people about health issues and mobilizing community partnerships to solve health problems. While in Uganda, we held events and home-to-home visits to inform people about Safe Mama Kits and the importance of clean delivery practices to reduce infections. We also continued to develop partnerships with the two health centers that will distribute the kits, as well as mobilize one of the community groups to create cheaper kits that they could sell in the future in the area. Safe Mothers, Safe Babies recognizes the importance of involving the community members in any health projects that they initiate in the community as SAFE wants them to be able to take over the projects in the future.

"Be the facilitator, not the doer" - Erin Glueckert

Critical Practicum Events

- Creating a Path Plan for Safe Mama Kit distribution
- Meetings and focus groups with the local health centers and community groups
- eRanger/Safe Mama Kit Kick-off
- Traditional Birthing Attendant safe motherhood training

“Only with the community’s input can we determine a plan that is sustainable and works for them.”

Traditional Birthing Attendant safe delivery training.

Summer 2011 • Monika Tomczuk • Safe Mothers, Safe Babies • Safe Mama Kit Promotion and Distribution
Veterans Cancer Rehabilitation Study (Vet-CaRe)

By: Robin Ward

This summer I worked with the Houston VA Health Services Research and Development Center of Excellence at the Michael E. DeBakey VA Medical Center to assist in their Veterans Cancer Rehabilitation Study (Vet-CaRe). In this study they are looking at the longitudinal course of functional disability, psychological distress, and community integration following cancer treatment in the veteran population. The primary aim of the study is to provide empirical data to define rehabilitation needs of veterans following cancer treatment.

My main project during the course of the practicum was to perform a thorough literature review in order to determine what physical performance measures of cancer survivors are being addressed and characterize gaps in the literature that could be filled by the Vet-CaRe study.

Public Health Significance

Due to improvements in cancer detection and treatment, more individuals are surviving longer. However, cancer and its treatment are associated with various long-term mental and physical side-effects.

This practicum experience most closely related to the first and second essential public health service:

#1 Monitor health status to identify community health problems

#2 Diagnose and investigate health problems and health hazards in the community.

The Vet-CaRe project aimed to monitor the health status of veterans who are cancer survivors in order to identify potential health issues that could impact their long-term quality of life.

My role in the project helped to identify gaps in the literature where additional work needed to be done.

Addressing the second essential public health service, the study strived to diagnose and investigate long-term health problems in order to identify rehabilitation needs of the study population.

Practicum Highlights

- Attended weekly team meetings where assessment interviews of study participants were reviewed
- Presented a mini-journal club reviewing a relevant publication
- Produced a literature review summarizing current relevant publications

“The lifetime risk of cancer is about 1 in 2; 10 million Americans, 500,000 of whom are veterans, are now cancer survivors.”

Veterans have unique risk factors for cancer... including PTSD which can contribute to poor psychosocial adjustment to life stressors.

Summer 2011 • Robin Ward • Michael E. DeBakey VA Medical Center • Veterans Cancer Rehabilitation
Ergonomic Assessments

Ergonomics in the Workplace

By: Anar Zaveri

I completed my practicum at Baker Hughes, an oil company, where my specific focus was dealing with ergonomics. During my internship, I was responsible for completing various ergonomic assessments for workstation and lab equipment.

The organization I worked with was in the process of rebuilding some of the labs and getting new equipment, and during this, they realized a lot of the equipment in the lab was not ergonomically correct. In order to resolve this issue, my duties were to evaluate the labs and the employee’s posture and make recommendations based on my perception of employee needs.

I created a few products for my practicum: a complete ergonomic assessment for the lab and office work station, and an ergonomic guideline.

Public Health Significance

There are many essential services to public health that my practicum fits under but I think there a couple that stand out. One is to inform, educate and empower. When I’m doing these assessments I’m informing and educating employees on an ergonomically correct workstation in hopes to decrease the amount of work related injuries.

Another public health service that fits my practicum experience is evaluating. I evaluate the employees’ posture and how they sit at their work station. Through my research I discovered that many employees were unaware of how to ergonomically set up their work station.

Baker Hughes contributes to public health by making their employees aware of ergonomics, thus decreasing work place injuries. They are a huge proponent of providing the best ergonomic equipment for each individual.
Rural County Prenatal Care

Prenatal care is vital to a baby’s healthy development.

Tips to Prevent Problems During Pregnancy:
- Take Folic Acid to prevent birth defects
- Don’t smoke to prevent your child from a lifetime of chronic illness and disease
- Don’t drink – there is no known “safe limit” of alcohol consumption
- Know your family’s genetic history in order to identify and understand your baby’s risks

Special duties during my practicum:
- Served as the Project Team Lead for the prenatal care and breastfeeding summer projects/practicum
- Attended a UTPRC Community Advisory Group (CAG) meeting
- Conducted a population assessment by analyzing demographic data of the rural counties in Region 5/6
- Continuing work on a prenatal care and breastfeeding toolkit to improve prenatal care services in Region 5/6

“There is only one pretty child in the world, and every mother has it.”
- Chinese Proverb

Prenatal Care in 1st Trimester Mothers

By: Marlisa Allen, MPH

My practicum experience was conducted with the Texas Department of State Health Services (TDSHS), Region 5/6. I was given the responsibility of being a project team lead for the prenatal care and breastfeeding summer projects.

The purpose of my project was to come up with a prenatal care toolkit that rural counties can use to initiate or improve prenatal care services in their respective communities.

Public Health Significance

According to the American Public Health Association’s 10 Essential Health Services, my project most closely relates to developing policies and plans that support individual and community health efforts.

This is significant to public health because in providing access to affordable quality healthcare, women and their babies will experience better health outcomes which ultimately can lead to a decrease in the burden of illness, disability and disease.
Community Health in Roatan, Honduras

Pilot Proposal for Community Health Workers in Roatan, Honduras

By: Ryan Arnold

Throughout the summer, I, along with three other students of public health at the University of Texas, volunteered with Clinica Esperanza in hopes of beginning a community health worker (CHW) network. The CHWs would be responsible for education and newborn home visits to ensure proper development.

Initially, we wanted to better understand the delivery of perinatal care on the island, and then we surveyed key informants on the needs and implementation of CHWs. We found that education was much needed on the island and many mothers missed their 7 day check-up after giving birth.

From this information, we developed a proposal for a partnership between Rotary International, Roatan Chamber of Commerce, and Clinica Esperanza to begin a pilot CHW network for the island.

Public Health Significance

Our CHW network development focused on a number of essential public health services including: informing, educating, and empowering the community; mobilizing community partnerships; linking people to health services in isolated areas; and developing a plan to support the community health efforts.

Clinica Esperanza focuses on both clinical services as well as education services for the community. Likewise, a key component of our proposal is the integration of education into the CHW plan. In order for our network to materialize, we needed to mobilize resources and support from a number of key people and organizations in the community. Along with education, a goal of our plan is to link isolated people and communities with newborn health services provided by the CHW.

Finally, our pilot project is the beginning of a sustainable community health effort.

In partnership with Clinica Esperanza, our proposal will provide many essential components of community health for Roatan, Honduras.

What we did:

- Surveyed key informants on the needs of the island
- Developed a pilot proposal for CHWs
- Administered eye exams in schools across the island and delivered eye glasses
- Visited local clinics and hospital to better understand the health care delivery on the island

“This is an island full of potential ready for any who are interested in improving the health of a rural, developing region.”

-Ryan Arnold

Summer 2011 • Ryan Arnold • Clinica Esperanza • Community Health in Roatan, Honduras
Preventing MRSA Transmission

MRSA bundle:
1. MRSA nasal screening of patients upon admission, transfer, and discharge
2. Contact isolation of positive patients;
3. Standardized hand hygiene
4. Cultural transformation campaign with staff and leadership engagement through positive deviance
5. Ongoing monitoring of process and outcome measures.

Public Health Significance

During my practicum, I observed many of the Public Health Essential Services, such as monitoring of health status, informing and educating, developing policies and plans, enforcing the regulations, and evaluating the effectiveness of an initiative. Through a hospital wide MRSA screening program as part of the MRSA prevention bundle, nasal carriers of MRSA are identified and placed into isolation so as to decrease the transmission to naïve patients and decrease the overall hospital acquired infection rates. This monitoring of health status of admitted patients contributes to the overall strategy of decreased infections, including SSI. In order to successfully implement the MRSA prevention bundle, a change team was created with a champion in each of the nursing units and health care providers were informed and educated about the consequences of MRSA infections with their associated high costs, high morbidity and mortality. The health care providers were then empowered to achieve 100% compliance with the bundle and to encourage colleagues and staff to be in compliance. Through the support of the hospital leadership, policies regarding the compliance with the bundle were developed locally to ensure compliance with the national mandate and resources were supplied so that the screening could be performed using a rapid MRSA PCR assay and through a dedicated MRSA coordinator responsible for tracking the data. The collected data is then reported to a central VAMC agency (IPEC) and the MRSA transmission rates calculated. Through this the effectiveness of program can be determined. Through my practicum, I was able to determine the impact of the MRSA bundle on SSI and observed that the transmission rate decrease, the overall HAI infections decreased including SSIs.

Implementation of a methicillin-resistant *Staphylococcus aureus* (MRSA) prevention bundle results in decreased MRSA surgical site infections (SSIs)

Over the past decade, the prevalence of MRSA carriers has increased ranging from 3.7% to 20%. Transmission of MRSA to naïve carriers results in increased hospital acquired MRSA infections, including SSIs in postoperative patients. MRSA SSIs increase morbidity and mortality. In late 2006, our hospital implemented a MRSA prevention bundle to decrease MRSA transmission and nosocomial infections. The objective of my practicum was to examine the impact of the MRSA bundle on SSIs in surgical patients. The MRSA bundle implemented hospital-wide by October 2007. I collected the data from October 2005 to October 2009 and analyzed it to determine the compliance rate with the MRSA bundle and SSI rate in patients undergoing Cardiac and Orthopedic surgery procedures.

| Table 1: Prevalence and screening rates for admitted patients |
|-------------|--------------|
| Variable    | 2007         | 2008         |
| Prevalence of MRSA | 18%          | 18%          |
| MRSA screening on unit admission | 94%          | 94%          |
| MRSA screening on unit discharge | 82%          | 80%          |

| Table 2: Impact of MRSA bundle on MRSA transmission and infection |
|-------------|--------------|
| Variable    | 2007         | 2008         |
| MRSA transmissions | 5.8 per 1,000 BD | 3.0 per 1,000 BD |
| C. Difficile infections | 2.2 per 1,000 BD | 1.0 per 1,000 BD |

Overall MRSA nosocomial infections decreased from 2.0 to 1.0 per 1,000 bed-days (P < .016) and a significant decrease in *C. Difficile* infections (Figure 1,2). There was a statistically significant decrease in overall SSIs (P < .05), with a 65% decrease in orthopedic and cardiac MRSA SSIs.
**Public Health Significance**

Evaluate effectiveness, accessibility and quality of personal and population-based health services.

Developing of health service analysis and research into healthcare payments systems especially special medications used for the treatment of chronic diseases.

My project looked at oral oncology medications which is the new face of cancer treatment and also looking at the various co-payments made by the patients who make use of the medications.

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**Comparison of Availability and Accessibility of Oral Oncology Products between Medicare, Commercial US, and UK National Health Service Patient Populations**

By: OLUBIYI AWORUNSE

It was an investigative research and required lots of searches for data and complying of data and use of the internet. The project kicked off in January and will be officially closed in October.

My focus was on the disparity in accessible and affordable healthcare intervention.

Publishing and presenting a paper in an academic journal to bring the issue into awareness.

Involved in data gathering and searches, preparing of PowerPoint and presenting the paper.

Oral presentation at the 139th APHA Annual conference.

The population with limited resources paid more out of pocket for oral oncology drugs

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"the goal is to make the best treatment available at a cost effective rate for the underserved population"

There will be no need to receive I/V’s anymore for cancer patients.

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Summer 2011 • Olubiyi Aworunse • Ingenix Consulting/ UTSPH • Comparing availability and accessibility of Oral Oncology drugs between US and UK patients.
Maternal and Child Health

I conducted my practicum at the Texas Department of State Health Services (TDSHS), Region 6/5 South. I conducted a policy study on the Title V Maternal and Child Health Block Grant and its application to Texas and the Region 6/5 South counties lacking local health departments.

I studied any and everything relating to the Title V Maternal and Child Health Block Grant in Texas. I gathered and analyzed data from the target counties. I also searched the literature for model and promising maternal and child health interventions specific to rural areas. These interventions could help fill in the current gaps in maternal and child health in the target areas.

My final products were a policy brief with recommended interventions and a longer report of my findings.

Public Health Significance

According to the Essential Services of Public Health, my practicum closely relates to: develop policies and plans that support individual and community health efforts and evaluate effectiveness, accessibility, and quality of personal and population-based health services.

For my project, I had to study the Title V Maternal and Child Health Block Grant and determine its impact on TDSHS Region 6/5 South: counties lacking local health departments. I also had to search the literature for best practices in rural health and in maternal and child health. Hopefully, the interventions I found could be applied to the target areas. This is similar to both of the essential services of public health.

This is significant to public health because it is trying to improve maternal and child health outcomes in rural areas in Texas.

“Policy has the ability to make a great impact, especially for those living in medically underserved areas”

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Expecting mom with child

Mother and baby

Special events/duties during my practicum
- Attended a UTPRC Community Advisory Group meeting
- Conducted a literature review
- Wrote a policy brief

Title V MCH Block Grant in TDSHS Region 6/5 South: Counties Lacking Local Health Departments

By: Ashela Bean

“Policy has the ability to make a great impact, especially for those living in medically underserved areas”

Mother and baby

Photo 1 retrieved from www.sfdph.org
Photo 2 retrieved from http://yorkcity.org/maternal-and-child-health-programs

Summer 2011 • Ashela Bean • Texas Department of State Health Services • Maternal and Child Health
I participated in the project implementation through assistance with baseline data collection; porcine blood samples to determine porcine prevalence of disease and assistance in translation for data entry of a cross-sectional door-to-door survey to estimate the baseline prevalence of NCC-associated epilepsy, presence of household toilets, and habits of eating raw pork. I assisted with project evaluation by contributing a logic model of the project.

Neurocysticercosis (NCC) is a public health concern in developing areas of the world because it is considered to be one of the leading causes of epilepsy. The causal agent of NCC is the Taenia solium tapeworm (Figure 1). A study conducted in Eryuan County in 2007 reported a human seroprevalence of 18.8% to antibodies of cysticercosis. Breaking the cycle of disease involves strategies that prevent infected human feces from entering the environment through subsequent ingestion by pigs and humans. The practice of eating raw pork is an important part of Bai culture and so it is difficult to break the cycle of the tapeworm through prevention of eating raw pork. Through the social marketing campaign, Okii aims to increase proper use of household toilets among the Bai to break the cycle of the T. solium tapeworm, thus preventing the spread of the disease. The work of this 3-year project covers a number of Essential Services of Public Health. The aim of this project is to “inform, educate and empower people about health issues” and to “mobilize community partnerships to identify and solve health problems” through the social marketing campaign of household toilets.

Constructing Patient Friendly Materials

The Literacy Coalition of Central Texas (LCCT) strengthens Central Texas literacy education providers through advocacy, research, training, and resource development. In the Health Literacy Initiative, The Coalition is committed to increasing the health literacy of Central Texas through a two pronged approach. I worked with LCCT’s Health Literacy Initiative to develop, evaluate, and disseminate health related “plain language” materials outlining changes in public benefits per healthcare reform 2014 to the healthcare providers in our network. The plain language movement originated with the federal government and ensures all individuals the ability to find what they need and understand what they find through clear communication from printed materials.

The six plain language documents are branded into the series “Health Care Can’t Wait”. The series includes information on the Individual Mandate, Medicare, Medicaid, Pre-Existing Conditions, and the Health Insurance Exchange. All materials are written at the eighth grade reading level. This means the average American can’t fill out a medical history form which can greatly impact health outcomes.

As the Public Health intern, I worked closely with a consultant at Sage Words for materials construction. Focus groups with Central Texas community members were conducted to evaluate information design and dissemination strategies. Successful outreach was performed and community members expressed increased knowledge surrounding Health Reform and the importance of patient-provider communication.
Medical Record Consolidation

Storage Savings Project at Baylor College of Medicine
By: Jazmine Cavazos

This summer, I had the pleasure of working as an administrative intern for the Medical Genetics Laboratories (MGL) at Baylor College of Medicine. I was hired to conduct an in depth analysis of the MGL’s medical records storage accounts and develop an implementation plan to consolidate all medical records.

This project primarily focused on the management and policy aspects of public health.

Public Health Significance

My practicum experience is public health significant in the sense that it presented a solution to a problem in health care. My project is considered part of the “Research for new insights and innovative solutions to health problems” component of the essential services of public health.

Resulting from the efforts of the storage savings project, the clinical departments at Baylor were able to update their records in accordance with BCM’s record management policy, eliminate unnecessary storage costs, and promote sustainability in their business practices.

As a result, the clinical departments could more effectively focus on Baylor’s primary mission of, “commitment to being a national leader in advancing human health through the integration of patient care, research, education, and community service.”

After I conducted a preliminary analysis of the storage cost vs. destruction fees of outdated medical records, my preceptor suggested that we expand the project to all of Baylor’s clinical departments.

With the help of my storage savings reports, my host organization was able to negotiate a reasonable rate for the destruction of all inactive clinical files.

My project resulted in an estimated cost savings of $590,201.33 over the next 10 years.

Discovering innovative methods to eliminate excess costs and promote efficiency is critical to the future of health care management.
Improving the injection process at Texas Children’s Hospital—Infusion Room

By: Michelle Cohen

Who: Worked primarily with a Pediatric Oncologist who is working on a quality initiative team to improve efficiency in the infusion room.

What: Assigned to create a database and develop recommendations for improvements for the infusion room, specifically for the injection process.

Where: Texas Children’s Hospital, Cancer Center Infusion Room.

When: Summer 2011.

Why: Management is quite unaware of the workings of the infusion room; for example, how many injections vs. infusions or transfusions are performed on a daily basis, is there a peak time of day that injections are administered, how many patients do not show up for appointments, etc. However, management is aware of the inefficiencies and chaos that is often seen in the infusion room. By improving efficiency in the infusion room the Cancer Center will be able to (1) open up inpatient hospital beds, (2) be more profitable, (3) improve quality through safety and patient satisfaction.

How: A database was created with over 1270 patients detailing patients’ scheduled appointment times, actual arrival times, and procedures given, among some of the data points. This database was strengthened with time motion studies, direct observations as well as several interviews.

Duties during my practicum:
- Create a database to obtain current status of the infusion room
- Perform direct observations
- Execute time motion studies
- Conduct interviews with essential personnel

Observations and recommendations about nurse/patient communication, specifically in regards to nurse interactions with non-English speaking patients and how the long wait times are addressed, were also presented. The practicum allowed for evaluation as well as, hopefully, the opportunity for reinvention so that the chaos can be turned into positive impacts for effectiveness, accessibility, and quality of services. While this practicum focused on one infusion room in one setting, many issues I faced are applicable on a global scale. It was an interesting and rewarding experience.
MHM HEALTH POLICY INTERNSHIP

Public Health Policy: Analysis & Advocacy

By: Allie de Beer, DrPH student

At my internship, I functioned as a policy analyst and advocate. I conducted review of the 2011 Texas Legislative Bills that could affect “those least served”, health care practice, providers, and hospitals. I participated in public policy and advocacy efforts on issues and health policies that impact state and local communities. I performed policy analysis and fiscal/budgetary impact analysis related to legislative agenda of MHM organization and their funded partner organizations. Advocated and lobbied for policies that enhance the health and well-being of families and communities. I participated in forum and coalition meetings. Lobby to increase access to health care, increase the percent of insured Texans, improve access to youth mental health services, increase the health care workforce, and support the broadening of the scope of practice for Advanced Practice Nurses.

Public Health Significance

MHM’s policy agenda is carried out by:

- Increasing the public’s understanding of how health policies impact their communities
- Strengthening and cultivating relationships with other groups concerned with health policy
- Advocating for policies that enhance the health and well-being of families and their communities

MHM’s public policy and advocacy efforts at the state level aim to:

- Increase access to primary care and mental health services
- Increase state efforts at addressing the prevention of chronic illnesses through healthcare education initiatives (obesity & diabetes)
- Promote state policies that increase healthcare workforce for the least served
- Promote policies to decrease number of uninsured

“Do all the good you can, By all the means you can, In all the ways you can, In all the places you can, At all the times you can, To all the people you can, As long as ever you can.”

John Wesley
Founder of Methodism

MHM Policy Team, L-R: Carlos Gomez, Miryam Bujanda, Allie de Beer, Dr. Ed Codina; not photographed: Sandra Martinez.

(Photos courtesy of Methodist Health Care Ministries)
Reducing Tobacco Use amongst Pregnant Women

My practicum experience strongly related to Public Health Essential Service #10: Research for new insights and innovative solutions to health problems. Tobacco cessation programs usually consist of standard counseling sessions, informative brochures, etc. My job was to find different types of programs that have been seen to be more useful in helping pregnant women decrease tobacco use. For example, one program I came across, Baby’s Breath, used tailored videos of smoking-related information that were customized for women depending upon how ready they were to quit smoking. A comparative chart of the most effective programs would then be given by the Texas Department of State Health Services to hospitals/clinics interested in implementing these types of programs. This type of already-created toolkit makes it easier for hospitals and organizations to implement these types of programs.

Public Health Significance

For my practicum, I researched programs that targeted decreasing tobacco use amongst pregnant women, more specifically women in their last trimester. Many programs have been implemented, but the issue of tobacco use during pregnancies remains. As a result, I focused on searching for original and innovative programs that applied social marketing techniques to their tobacco cessation programs. I then analyzed and created a chart of what seemed to be the most effective programs. My final product for the practicum site was a comparison chart of different social marketing campaigns that have been used to decrease smoking amongst pregnant women. I also created a contact list for the Wharton County of Texas of all health-related organizations, clubs, and hospitals that could be useful for these programs.

Looking at things from a different angle: How to turn smoking into a socially unacceptable behavior

Tobacco use during pregnancy is still a major health issue. Innovative techniques are necessary to reduce smoking during pregnancies. Source of image: http://www.modernguidetohealth.com/drugs-health-supplements/smoking-during-pregnancy.html

Special events/duties during my practicum:
- Seeing the different divisions of Texas Department of State Health Services in action
- Learning about all of the types of organizations that can be involved in health programs
- Understanding how to analyze programs to determine effectiveness

Example of Social Marketing Campaign
Source of image: http://tobaccofacts.wordpress.com/

WARNING
CIGARETTES HURT BABIES

Tobacco use during pregnancy reduces the growth of babies during pregnancy. These smaller babies may not catch up in growth after birth and the risks of infant illness, disability and death are increased.

Health Canada

Example of a Social Marketing Campaign
Source of image: http://tobaccofacts.wordpress.com/

Summer 2011 • Dimple Desai • Texas DSHS • Tobacco Use Amongst Pregnant Women
Public Health Significance

My practicum experience was related to the essential services of public health in many ways. These include monitoring, diagnosing/investigating, developing policies, enforcing regulations and researching. Being that my host organization was a large teaching and research hospital, The Methodist Hospital monitored the health status of its community, diagnosed diseases, developed new policies to maintain good legal standing in their clinical and operational practices, enforced current regulations as they related to accreditation and the new healthcare reform laws and also conducted many research initiatives with aims to combat diseases and illness and to make medicine more innovative. My specific Core Measures implementation project dealt directly with the PHES of enforcing laws & regulations that protect health & insure safety. All of the core measures standards sought to ensure that health was protected and that safety was a top priority.

Hospital Operations and Management- Clinical and Administrative

By: OBIAJULU N. ENAOHWO

At my practicum site this summer, I worked on a number of different projects that involved healthcare management and operations. I worked directly for the senior vice president of operations, which gave me the opportunity to see all areas of the hospital’s organization.

One public health issue that I worked on was implementation of core measures to prepare the hospital for DNV accreditation. This required making sure that all clinical areas of the hospital were at the highest standards in regards to patient care, quality and access. My organization took a very calculated but aggressive approach to make sure that they were at 100% for each core measure area. Physicians, nurses, directors and managers were contacted individually to discuss areas for improvement in their clinical areas.

Special events/ duties during your practicum

• Meeting with the CEO of The Methodist Hospital
• Worked on creation of 3-year business plan for surgical skills lab
• Attended legal and governance meetings with hospital senior leadership

“Good management is the art of making problems so interesting & their solutions so constructive that everyone wants to get to work & deal with them.” - Paul Hawken

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The Texas Women's Health Program is available to ALL women between the ages of 18-44 and with an income at or below 185% of the Federal Poverty Level.

Public Health Significance

I spent a majority of my time, researching the Texas Women’s Health Program and evaluating community based programs. I have learned that becoming an expert on the policy itself is crucial to understanding the importance of your research. From the moment the policy became effective to the day that the legislature threatened to discard the WHP program, I have placed the policy under a microscope.

In order to see the value in the WHP, I researched and evaluated the programs’ effectiveness throughout Texas. I asked myself the following questions:

- How has the WHP affected the health of women throughout Texas?
- What are the potential consequences of removing the Women’s Health Program?
- How can DSHS increase the use of WHP throughout rural areas?

I conducted a complete policy analysis of WHP, only to find that removal of the program would increase the number of unintended pregnancies and possibly increase the number of premature/low birth weight babies.

The goal of DSHS is to implement effective programs throughout Texas and the department is always looking to other programs for successful ideas. Unfortunately, the programs that I evaluated did not provide effective measurements for recruiting physicians and were of little use to the department.

I began conducting policy research on the Texas Women’s Health Program (WHP) for the Texas Department of State Health Services (DSHS) in the spring.

The primary purpose of this internship was to research and analyze successful community based programs designed to recruit physicians within rural areas.

Seven counties within Region 5/6 of Texas are rural areas and do not have a county health department. It is the job of the regional health department to support and assist the following counties: Austin, Colorado, Liberty, Matagorda, Walker, Waller and Wharton. The most efficient, yet least costly option for the department was to reach out to graduate students for assistance in the endeavor.

I provided DSHS with a chart of all Federally Qualified Health Centers (FQHC), Rural Health Clinics (RHC) and family planning clinics within the 7 rural counties. I contacted all clinics to find out whether each location accepted WHP.

After gathering the list of WHP providers, I found that all but one county housed a government funded clinic with a WHP provider. I proceeded to ask each clinic “What percentages of people come in for family planning services?” All of the clinics, primarily FQHC clinics, claimed to serve people with general health issues and family planning visits were a small portion of the clinic’s business.

From the information gathered, I concluded that a lack of family planning visits by members within the county were due, but not limited to the following issues:

- Lack of WHP providers
- Little knowledge of the Texas Women’s Health Program
- Limited information on the value of prevention

http://office.microsoft.com/

“This program allows women to begin and/or continue a healthy life by offering yearly pap smear tests, as well as, family planning services.”
Public Health Significance

The Area Profiling project contributes towards diagnosing and investigating health problems and health hazards in Harris County, Texas. Vector borne disease surveillance is an essential tool for assuring the safety of the community. The Area profiling project assimilates disease surveillance data and specific area information into a database to provide a more efficient response to communities where the risk of mosquito borne disease is greatest.

West Nile virus and Saint Louis encephalitis activity in mosquitoes, birds and humans is updated in the database daily. This assists in narrowing mosquito control efforts to affected areas and provides information to the public regarding disease activity in the community.

The Area Profiling project aims to provide real time information that will guide a rapid and precise response to an outbreak of mosquito borne disease in specific areas of the community.

Harris County Mosquito Control - Area Profiling Project

By: Jennifer Garb DVM

During my practicum I observed field work including mosquito trapping, avian trapping and operational area mapping. I spent time in the virology laboratory, learned about GIS systems and interviewed section supervisors.

The public health topic of my practicum was vector borne disease surveillance and control in Harris County.

The Area profiling project is a centralized database that combines mosquito collection data, geographic and environmental information and demographic data to enhance a more efficient response to specific communities where the potential for mosquito borne disease is greatest.

My duties included gathering all relevant information that should be incorporated into a functional program protocol for area profiling.

“Area profiling is one of the most extensive vector borne disease surveillance programs in the country.”

Source: HCPHES website 2011.

• West Nile virus surveillance
• Saint Louis encephalitis surveillance
• Dengue fever surveillance

Storm sewer mosquito trap.
(Jenny Garb, 2011)
Creating guidelines for standard of practice in breastfeeding teleconsultations

By Danielle Herbert

Many new mothers initiate breastfeeding with their infant but need some extra support and guidance to continue through the first six months of life. The Lactation Foundation has worked hard to provide Houston area mothers who are on WIC with a place to receive breastfeeding support and education from a Board Certified Lactation Consultant or IBCLC. Due to the inconvenience of traveling to the clinic with a newborn, the Lactation Foundation has designed a form of teleconsultation which can be done over the internet using a webcam.

This is a new and unique way of conducting breastfeeding consultations. There are currently no guidelines or standards of practice within this field. In order to ensure a high level of quality is maintained during these appointments a set of guidelines has now been created. These guidelines will provide the basis for teleconsultation practice and once approved by the USDA will serve as a reference for many agencies looking to adopt a similar practice.

Public Health Significance

The natural milk produced by a mother is as unique as a fingerprint and designed specifically for the baby. The composition of the milk is designed to meet all nutritional needs of an infant. This is the most rapidly changing time in a person’s life and the feeding choices made by the mother will affect her child forever. Human milk aids in growth and development, strengthens an infant’s immune system, and decreases their life-long susceptibility to many diseases including obesity.

In order to lower the prevalence of many preventable diseases it is important to promote breastfeeding while also providing a link between the population in need and the practitioners who provide education and support.
Cancer Genetics Lab Market Analysis

Baylor College of Medicine Launches New Cancer Genetics Laboratory

Baylor College of Medicine is well known for their success in the Department of Molecular and Human Genetics and their Medical Genetics Laboratory. The Medical Genetics Laboratory (MGL) specializes in testing for rare diseases. Due to the great success of the MGL, the Department of Molecular and Human Genetics decided to launch a Cancer Genetics Laboratory in an effort to expand their expertise in clinical diagnostic testing into the cancer diagnostic market.

During my practicum, I was responsible for conducting a market analysis to assist the department in understanding the current environment for cancer diagnostics and to help plan a marketing strategy for their services. The Cancer Genetics Laboratory (CGL) had been developed nearly a year prior, but the marketing efforts had not been clearly defined. It was my job to help the department define their marketing objectives and develop a website that would allow them to better market their cancer genetics testing services.

Public Health Significance

Baylor College of Medicine, the Medical Genetics Laboratory (MGL), and the Cancer Genetics Laboratory (CGL) are dedicated to furthering research in the area of clinical diagnostic testing. By developing tests that are on the cutting edge of technology, Baylor contributes to improving the quality of life for those who suffer from rare genetic disorders.

With the launch of the new Cancer Genetics Laboratory, BCM further demonstrates its dedication to personalized medicine by developing and launching tests that meet the needs of the cancer testing and treatment market.

The purpose of my project was to develop a website as a marketing tool to help link vital clinical diagnostic testing to physicians and patients. It brought a variety of different types of physicians, scientists, and business managers together to generate ideas about how we as healthcare providers can best serve our patients.
Non-drug Interventions at Lexington Place

Non-drug Interventions including Music Therapy and the use of Pharmaceuticals

By: Sitara Joseph

I assisted with the music therapy program. The main goals of my practicum were to help conduct pre-tests and post-tests using the Cornell Depression Scale and RAGE scale to measure depression and aggression which are the two most common symptoms exhibited by Dementia and Alzheimer patients. Coro health installed a music program. Interviews were conducted to see what each resident’s music preferences were. The results showed that there was a reduction in depression and aggression!! I also attended a few care plan meetings where I created individualized care plans that met a resident’s specific needs. At my time here, I was in charge of 25 adults. My responsibility was to develop and implement programs that enabled older adults to maintain personal health and wellness. This was done through activities such as morning exercise, “Travel the World”, autobiographies, art class, photography club, games, stretch and strengthen, and gratitude and grace. The main goal was to encourage non-drug interventions in reducing depression and aggression. I am in the current process of analyzing the use of drugs such as Ativan and PRN to see if there is a reduction after the installation of the music therapy program and the memory care program. Although I don’t have the results to show, hopefully it shows a decrease in the use of psychotropic drugs.

Special events/ duties/highlights

-Various events such as Valentine’s Day celebration, PROM 2011, Juneteenth, Cinco De mayo
-Field trips to Bluebell factory, Museum of Fine Arts, Reliant Stadium, Miller Outdoor Theater

Public Health Significance

The Public Health Essential Service that most closely relates to my practicum experience is to monitor health status to identify community health problems.

The problem in the nursing home is the overuse of chemical pharmaceuticals. It is very apparent when you see residents slumped over in their wheelchairs, lethargic and sluggish, drooling from the mouth. Lexington place has transformed the traditional Activities office into what is now termed the “Wellness Department” because we want to focus on all aspects of wellness such as social, occupational, spiritual, physical, intellectual, environmental, mental, emotional and medical wellness. Wellness is very much multidimensional.

Another Public Health Essential Service that relates to my practicum experience is inform, educate, and empower people about health issues.

One thing that is currently happening is the “Culture Change” movement. The main purpose of this movement is to transform adult services to focus on individual directed values. We want to give a voice to the elderly and make sure that their values are respected.

“This has been such a humbling experience for me. It is a privilege to be here and get to know and build relationships with these people.”
Public Health Significance

Our work this summer certainly touched many of the Essential Services of Public Health. The primary Essential Service addressed by our practicum activities was MOBILIZING community partnerships to identify and solve health problems.

We spoke with community members themselves as well as governmental representatives, business leaders and non-governmental organizations on the island. The ultimate goal of the program is to bring together all of these sectors to improve the health of the people of Roatán.

The promotora program itself will encompass more Essential Services:

- Monitor health status to identify community health problems.
- Inform, educate, and empower people about health issues.
- Link people to needed health services and assure the provision of health care when otherwise unavailable.

Taking the Clinic to the Community

By: Angie Lloyd

Together with three other UTSPH students, I worked through Clinica Esperanza in Roatán, Honduras this summer. Clinica Esperanza is a non-profit clinic founded by Peggy Stranges (our community preceptor) in 2006.

As public health volunteers we juggled multiple community-based projects. Our primary project was to draft a grant proposal for a promotora de salud (community health worker) program on the island. To determine health needs as perceived by the islanders, we interviewed community members, clinic workers and business leaders on the island. We presented the idea of a promotora program to the local Chamber of Commerce and Industry and the Rotary Club to gauge their interest in possibly funding such a program.

By the end of our practicum we had confirmed potential funders for the program and written a draft grant proposal, which is currently being circulated for feedback.

Promotoras de Salud in Roatán, Honduras

Clinica Esperanza - a non-governmental clinic in Roatán, Honduras, founded by an American nurse

Photo courtesy of Angie Lloyd

Highlights

- Working with a native islander to perform vision screening for school children
- Presentation to local Chamber of Commerce & Industry
- Presentation to Rotary Club
- Meetings with Ministry of Health & Ministry of Education representatives

Visit the clinic webpage:
http://www.clinicaesperanza.com/

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Safe Sleep for Babies

Reducing the risk of Sudden Infant Death Syndrome through Safe Sleep for Babies Practices

By: Paula Lyrse

My practicum took place at DSHS, and my project included conducting research on safe sleep for babies practices in hospitals, becoming an expert on the Safe Sleep for Babies training provided by DSHS. Additionally, I presented my findings to a group of nurses at Huntsville Memorial Hospital as my final product; in an effort to facilitate DSHS’ ultimate goal of implementing hospital policies on safe sleep practices.

During my presentation I was able to provide some information that the nurses were not aware of. What I learned through my research is the importance of nurses in the dissemination of information to parents, because parents model the actions of the nurses. While nurses are aware of safe sleep practices, I also found that many weren’t aware that the AAP states that side sleeping is not safe for babies, and back sleeping is solely recommended.

Public Health Significance

SIDS is the leading cause of death of infants aged 1-12 months, and is the third leading cause of infant mortality in the U.S. By placing babies in a safe sleep position, their risk of SIDS can be reduced. Conducting trainings for nurses on safe sleep practices increase the potential for all parents to be informed. One of the public health essentials that relates to this practicum is to inform, educate, and empower. The goal of the safe sleep trainings is to educate mothers and other care takers of infants on safe sleep practices and its importance for the risk reduction of SIDS. The long term goal of DSHS is to develop polices and plans for hospitals; which is another public health essential. During my presentation with the nurses, I learned that they didn’t have any polices or plans in place relating to safe sleep. However, they were very eager to begin the process of implementing change at their hospital. They were also very interested in ways to implement some of my recommendations.

1. http://aappolicy.aappublications.org/cgi/content/full/pediatrics;116/5/1245
3. www.dfps.state.tx.us/itsuptoyou/pdfs/English_Safe_Sleep.pdf
From A Different Prospective

Outreach Observational Study
By: Jewel McZeal

The Legacy Community Health Services have many services geared to HIV/AIDS and STD’s education and treatment and one is outreach. The Director of Health Promotions wanted an extra set of unbiased eyes to see what the program could benefit and improve from. So an observational study of their HIV outreach locations was formed, which was my practicum.

Four days out of the week I would visit a different outreach location and observe the surroundings and ask the men there several questions about the agency and their personal opinion of HIV/AIDS and STD’s outreach.

The final product was a written report of my findings of the four locations, the responses from the questions about HIV/AIDS and STD’s outreach, and the comments and suggestions for improvement for the program.

Special events/duties/highlights during your practicum
- Engaging in informative conversations.
- Seeing things from a different point of view.

Public Health Significance

Many people would think that as much as the knowledge of transmission and treatment of HIV/AIDS and STD’s has increased the number of affected people of HIV/AIDS and/or STD’s would decrease; however, this is not the case. It has been statistically shown that the numbers are steadily rising and this issue has become one of the world’s top epidemics. Thousands of agencies have tackled this issue and one in particular is the Legacy Community Health Services.

At Legacy every day the staff monitors, diagnose and investigate with the community in educating, testing, and treating them in HIV/AIDS and STD’s. There the community’s sexual health status is their primary focus. Not only does Legacy inform, educate and empower, test, and treat HIV/AIDS and STD’s at their center but the agency also goes out into the community and does these things too.

“We need to band together as a unit, to conquer this virus.”

“Love has no boundaries”

Both pictures came from the Clip Art section in Microsoft Word. The actual source provided was http://office.microsoft.com
Public Health Significance

My practicum experience primarily focused on diagnosing and investigating a current health hazard. When a health facility does not have reliable electricity, the impact on health can be substantial. Blood bank refrigeration, vaccine refrigeration, microscope use, and equipment sterilization with an autoclave becomes impossible. In addition, inadequate lighting causes significant problems. Deliveries and c-sections are often done by the light of a kerosene lamp or a headlamp. Routine tasks such as stopping bleeding or inserting an IV become nearly impossible in dim lighting conditions.

Electricity via the grid is expensive at best and unreliable. Power outages between 30 minutes and 3 hours are common almost daily. Due to the high cost of fuel, running diesel generators for backup is no longer an option. Solar power provided a reliable and inexpensive alternative to the electricity crisis in Uganda.

Safe Mother Safe Babies

- Surveyed regional health facilities and hospitals for electricity needs
- Worked with local health centers and community leaders to help implement motorcycle ambulance program
- Created income generating model for solar panels to support motorcycle ambulance program and other MCH projects

“Electricity here is so expensive and unreliable. Solar is the only solution. Our only problem is the funding.”

Sulaiman Lule, Ibubanku Community Health Center

Delivery in Darkness: Solar Power Opportunities in Rural Uganda

By: Katherine Meese

I worked with a maternal and child health organization called Safe Mothers Safe Babies (SAFE) to address health issues in the Iganga District, Uganda. I worked specifically on an electricity needs assessment for health centers and hospitals, and a solar power implementation. SAFE was able to secure funding for solar powered generators and lighting form a US-based company. I chose the health facilities for placement of the solar equipment. I was also responsible for drafting and signing Memorandums of Understanding with the recipient health centers and creating appropriate methods to capture data that will be used to monitor program success. We were also able to sign a leasing agreement for the solar equipment for one hospital that will generate enough revenue to sustain our motorcycle ambulance program.

Operating Theater at Iganga District Hospital. Electricity goes out almost every night, and c-sections are conducted by kerosene lamp. Source: Katherine Meese

Kerosene lamps used for delivery at Ibubanku Health Center when there is no electricity. Source: Katherine Meese

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PEPFAR in Kisumu West District, Kisumu Kenya

By: Stephanie Meyer

Kisumu, Kenya is in Nyanza Province. HIV prevalence is 15%, and stunting and wasting are 43.9% and 5.4%, respectively for children under 5 years.

The President’s Emergency Plan for Aids Relief (PEPFAR) and the Ministry of Health (MoH) provide resources for HIV testing, counseling and treatment. The Walter Reed Project (WRP) is the conduit for local PEPFAR support. Treatment includes nutrition education and supplementation for the malnourished via the Food-By Prescription (FBP) program.

The effect of the (FBP) program in children 6 months to 5 years has not been evaluated in Kenya; an evaluation is needed and developing a proposal to do this was my project. Food insecurity is prevalent in the area, so knowing the effects of FBP will inform program administration in the future.

Public Health Significance

Linking people to services through the use of community health workers; informing, educating and empowering the population about HIV prevention, testing and treatment; and evaluating the effectiveness of programs are all pertinent to PEPFAR and the population it serves.

Over 28 community health workers (CHWs) are trained to provide testing in the field, particularly for women who are pregnant; home-based treatment and counseling is also provided; all CHWs refer clients to the next level of care as needed. Education related to HIV prevention, testing and treatment is provided through CHWs, the media, and medical facilities.

Finally, monitoring and evaluation of process indicators occurs regularly; an evaluation of the outcomes of the FBP is forthcoming.

The Walter Reed Project is working to build local capacity and sustainable health improvements through research and education and training for local healthcare and research support staff.

Special events/duties during your practicum

- 12 July Ward Rounds at Obama Children’s Hospital
- 14 July Innovations for Poverty Action Conference
- 1 August Meeting with Family Health Initiative Staff, Nairobi

"30% of children less than 5 years who are seen at the Comprehensive Care Clinic are malnourished."

Walter Reed Project, Clinical Research Center.

Summer 2011 • Stephanie Meyer • Kisumu Kenya • PEPFAR Nutrition
Public Health Significance

There are three main objectives for this practicum:

Investigate
I interviewed, held a focus group and created a survey to assess and understand the current knowledge, accessibility and usage of parks and other public spaces in Austin, TX.

Educate
I created bus maps to educate how to get around in the city of Austin. A pamphlet was also created to give basic information about parks.

Empower
I organized a Park Day event to show refugees how to get to the park using the city bus, show the parks amenities and its location, and basically a fun time at the park. This will empower them to come back to visit on their own.

Refugees Services of Texas overall goal is allow refugees and any displaced person to become self-sufficient and live a safe and successful life in Texas.
Conducting a Time Study in Perioperative Services

By: Leslie Paith

I served as an efficiency analyst in the Fondren Brown OR at Methodist Hospital. Operating rooms represent the most profit generating department in a hospital as well as the most costly. The administration at Methodist needed data to further understand timing within the OR. At first, I familiarized myself with the day-to-day operations and processes within the OR. Then, I learned how to set up a method for data collection to look at different time measurements. Through this process, I realized the value of consistency. After spending at least 120 hours collecting data through observation, I analyzed the data to look for trends. I organized the data and presented it in a precise but informative way to the administration. I also used my perspective from speaking with the surgical team and my qualitative observations to explain why these trends were likely occurring, and I offered suggestions regarding opportunities for improvement.

Public Health Significance

Methodist hospital makes a significant contribution to public health in Houston and the surrounding areas by providing health services to so many of its residents. As evidenced by the high rankings of many of Methodist’s specialties, this hospital system strives to achieve excellence in patient care.

In order to ensure continual improvement of the health services they provide, Methodist must evaluate their services.

This is consistent with the public health essential service: evaluate effectiveness, accessibility, and quality of personal and population-based health services.

Determining the effectiveness of a healthcare operation often requires evaluating the efficiency. Initiatives to increase efficiency and conserve resources will be of utmost importance in meeting the health challenges of the future.
DOTS, Suicide Prevention etc....

Operations Management- Cleveland County Clinic
By: Saurabh.D.Pawaskar

My practicum was with DSHS Houston, Texas 6/5 region. We were a group of 3 interns situated in three different cities in Texas and working with 4 different county clinics. I worked with the Cleveland County clinic.

I interviewed the staff of Cleveland county clinic about the DOTS TB program and based on their information prepared a document of work flow of the DOTS program in the clinic.

We also discussed about the various population based services provided by the clinic. We ranked the performance of the clinic in providing individual services to find areas for improvement.

I found suicide prevention in adolescents as a service that can be improved in my clinic. I prepared a toolkit on adolescent suicide prevention after consulting with my preceptor and clinic staff.

Public Health Significance

DSHS is a State agency which provides healthcare services to the communities in Texas in various forms. The Cleveland county clinic provides immunization and preventive services to the people of Cleveland and Liberty County.

It educates and informs the communities about various health related problems and empower them with tools and programs to be implemented in the community.

It partners with various organizations and businesses to help implement these programs.

My toolkit on suicide prevention suggested various evidence based programs that can be implemented in the communities to prevent suicides by improving awareness, identifying at-risk individuals and helping them strengthen their ties with the community.

An American dies by suicide every 15 minutes, and more than 34,500 die by suicide every year - SPAN USA

Source: www.universitylifecafe.org
Depression and social disconnect are one of the reasons for teen suicide.
Operations Management: Patient Satisfaction

Public Health Significance

My practicum falls under the two categories of: “Assure a competent public health and personal healthcare workforce. Evaluate effectiveness, accessibility, and quality of personal and population-based health services” regarding the Public Health Essential Service(s) (PHES).

Because I was working under the Operations side of KSC, this part of management is the hub for how efficient this outpatient clinic can run. This is why I feel it works in fulfilling the assurance of providing a “competent public health and personal healthcare workforce.”

In addition, being a part of the Patient Satisfaction Committee, we consistently evaluated patients’ needs and how KSC could do a better job at providing these needs, more efficiently and at minimal cost. Hence, this puts my practicum at also qualifying as a healthcare facility that “evaluates effectiveness, accessibility, and quality of personal & population-based health services.”

Patient Satisfaction at Kelsey-Seybold Clinic (KSC) Houston

By: NAYLA RAAD

My practicum involved working alongside the VP of Operations at Kelsey-Seybold Clinic (KSC) concerning Patient Satisfaction. I worked closely with the Patient Satisfaction Committee in analyzing the current Patient Satisfaction survey and developing process maps, employee training modules as well as new mechanisms in improving the survey tool.

I, personally, was able to work on the process mapping of the survey tool organized by regional campus. This gave the Committee a better visual of how the Patient Satisfaction survey tool was dispersed throughout each clinic and what issues needed to be resolved (such as bottlenecks, etc.) In addition, I was able to provide content for the training modules developed from the survey tool as well as provide the committee with a report at the end of my practicum summarizing my work there.

Duties from my practicum

• Working alongside patient satisfaction committee
• Process mapping survey tool across regional clinics
• Provided content for employee training modules to improve patient satisfaction

“Being a part of the Patient Satisfaction Committee, we consistently evaluated patients’ needs and how KSC could do a better job at providing for these needs.”

Source: blog.iowahospital.org

Source: hcrealty.com

Summer 2011 • Nayla Raad • Kelsey-Seybold Clinic • Patient Satisfaction
Public Health Significance

My practicum experience fits most closely with the public health services to inform, educate and empower as well as develop policies and plans. CPRIT itself covers most, if not all, of the essential public health services.

The Texas Cancer Plan itself is a plan to guide Texans in making healthier choices regarding cancer screening and other prevention measures. The Plan guides the state by making goals and prioritizing various prevention activities.

By helping to write the Texas Cancer Plan, I played the role of informing and educating people on cancer and prevention measures they can take. I also linked people to health services that may be useful to them by citing programs within the plan.

CPRIT encourages research by funding programs relevant to cancer. They also monitor cancer burden and help to increase access to care. Also, they mobilize people to create a team in cancer research and prevention.

Special events/duties during your practicum

- Advertising and preparing for stakeholder meeting at UTSPH
- Meeting key people from prevention programs throughout Texas
- Research cancer efforts

Cancer Prevention for all of Texas

By: Rachel Raia

I was the summer 2011 prevention intern for CPRIT in Austin, TX. My main responsibility was to help revise the Texas Cancer Plan. I wrote drafts for sections of the plan and found evidence-based information to incorporate into the plan.

I also helped to arrange stakeholder meetings and worked with the CPRIT team and stakeholders representing various geographic areas of the state.

CPRIT funds cancer research and prevention projects that take place within the state of Texas. They also make goals for the state as far as research and developing prevention programs, aiming to reduce cancer burden within the state.

The Texas Cancer Plan 2012 has not yet been released since it is still in the making; however, it is expected to be released in January 2012.
Medical Data QA and NASA

Standardization of Data Collection for the Lifetime Surveillance of Astronaut Health (LSAH)

By: Mansi Raval

My primary responsibility was applying quality control and assurance measures to data prior to analysis through the extraction of medical data from electronic medical records. My focus was vision data, which was then analyzed to identify outliers at the population and individual level. I reported my findings on data quality problems and proposed resolutions to doctors, statisticians, and other researchers working with the vision data.

Public Health Significance

A major goal of the LSAH study is to monitor the health status of the astronauts. Through annual, preflight, postflight, and periodic examinations problems are diagnosed and investigated on a regular basis. The medical data is also analyzed by NASA and its contractors to gain new insights and identify solutions for health problems associated with space flight. The vision data tracking was an example of how NASA applies some of the Essential Services of Public Health.

Special events/ duties
- Went to a public health conference that showed NASA’s work
- Attended a seminar describing ongoing NASA research
- Did extensive medical chart reviews and met with MDs to understand data

“Research is creating new knowledge.”
(Neil Armstrong)
Public health performance standards are intended to guide the development of stronger public health systems capable of improving the health of populations.

http://www.galaxyhealth.net/images/MPj04009410000%5B1%5D.jpg.

Local Public Health System Performance Assessment Instrument

By: Mayra Patricia Rendon

The Local Public Health System Performance Assessment (LPHSPA) tool is designed to assess the health capacity of rural counties using the version of the National Public Health Performance Standards (NPHPS) instrument.

The LPHS assessment instrument assists the communities in the following areas:

- To identify local and regional stakeholders providing public health services to Willacy county residents
- To understand the strengths and weaknesses of the public health system and the importance of prioritizing essential public health services by collecting and analyzing the information.

Public Health Significance:
- Improves organizational & community communication & collaboration
- Educates participants about public health & interconnectedness of activities
- Builds & strengthens the diverse network of partners.

The Local Public Health assessment tool is based on the framework of the 10 essential public health services and is used as a set of criteria to measure, monitor and to assess the progress toward health related objectives in the local communities.

Practicum Assigned Duties:
- Assist in creating a presentation of the results for the Willacy county Stakeholders.
- Participate in the local public health system assessment in order to understand the value of the NPHPSP.

Findings:

Figure 1: Summary of 10 Essential Public Health Services performance scores and overall score (with range)

http://www.cdc.gov/nphpsp/documents/NPHPSP_OverviewPresentation1-08.pdf

The figure displays performance scores for each Essential Service along with an overall score that indicates the average performance level across all 10 Essential Services. The range bars show the minimum and maximum values of responses within the Essential Service and an overall score.

DSHS recognizes that “all health is local, and that lasting health improvement comes from the interests and energies of people in communities.”

“Participating in the LPHS helped me to appreciate the importance of the local performance standard program in mobilizing and protecting communities, and improving their health overall.”

Creating a Behavior Based Food Safety Management System

By: Elise Russo

This summer I had the pleasure of working with the Office of Health Education and Promotion at Harris County Public Health and Environmental Services (HCPHES) on a restaurant food safety project. We partnered with HCPHES Environmental Public Health Division and the University of Houston to research and plan an eventual intervention to help improve the food safety culture of restaurants identified as “high risk” for foodborne illness outbreak potential by the county. HCPHES and I approached the project from a behavioral standpoint, meaning that we determined through the creation of a PRECEDE planning model that food safety culture is largely dependent upon human behaviors, and thus, it is those behaviors that need to change in order for food safety culture to improve overall. The project is still in its formative stages, but the next step is to determine the best food safety practices by using an online focus group method to assess responses from “food safety experts,” which are to be picked from a list of high-performing/low-risk Harris County restaurants. Once best practices are determined, an intervention for the high-risk restaurants will be designed.

Public Health Significance

Though HCPHES carries out all of the essential functions of public health in varying capacities every day, this project specifically focused on mobilizing community partnerships, researching to improve health issues, and developing plans to support community health efforts. We began by mobilizing our community partners, namely the University of Houston’s restaurant management program, which was already beginning work on a food safety project. HCPHES managed to align with the University of Houston to create a common goal statement and begin work to benefit both organizations and the community itself. Then, we began researching food safety culture and possible methods of changing it for those restaurants having difficulty maintaining a proper food safety management system. Though we are still in the research phase of the project, we will eventually move to creating an intervention plan to assist in altering the food safety behaviors of employees of restaurant’s considered “high risk” for foodborne illness outbreaks. In this way, our intervention will eventually reach the community at-large by preventing foodborne illness outbreaks.

Partners Involved in Food Safety Culture Project:

- Harris County Public Health and Environmental Services:
  - Office of Health Education and Promotion
  - Environmental Public Health Division
- University of Houston Conrad N. Hilton College of Hotel and Restaurant Management

“Our goal is to ensure that high-risk food establishments have a culture that will promote, support, and sustain good food safety practices and behaviors.”—HCPHES

Food Safety Culture Project Goal

Cervical Cancer Prevention

By: Sarah Schwaller

The National Cervical Cancer Prevention Program is one of the most active divisions within the Guatemalan Ministry of Health’s Reproductive Health Program. This is due to the fact that they are in the midst of a nationwide effort to improve the capacity and quality of the cervical cancer prevention program. It was an exciting time to have the opportunity to participate in the division and learn from the director, Dr. Erick Alvarez, who is very passionate about providing effective cervical cancer prevention. My duties included monitoring the prevention program in six regions of the country. Collaborating with regional reproductive health facilitators, I evaluated seven components of the programs which ranged from the screening test itself to education and promotion.

Cervical cancer prevention in Guatemala

Cervical cancer prevention in Guatemala is one of the most active divisions within the Guatemalan Ministry of Health’s Reproductive Health Program. This is due to the fact that they are in the midst of a nationwide effort to improve the capacity and quality of the cervical cancer prevention program. It was an exciting time to have the opportunity to participate in the division and learn from the director, Dr. Erick Alvarez, who is very passionate about providing effective cervical cancer prevention. My duties included monitoring the prevention program in six regions of the country. Collaborating with regional reproductive health facilitators, I evaluated seven components of the programs which ranged from the screening test itself to education and promotion.

Public Health Significance

My practicum experience aligns with the Public Health Essential Service to evaluate effectiveness, accessibility, and quality of personal and population-based health services. The findings from my project highlight both successful program aspects as well as areas of improvement.

The National Cervical Cancer Prevention Program has a significant impact on public health. They set policies, implement prevention and control activities, train practitioners and supervise activities within the regional health departments. They were recently acknowledged by the Pan American Health Organization for their efforts and chosen to host a regional conference on cervical cancer. Their most recent strategy includes expanding country-wide trainings for practitioners in VIA, a low-tech alternative to the Pap Test. This methodology has proved to be very effective, especially in low-resource settings.

Practicum Highlights

- Learning from Guatemalan health practitioners
- Conducting site visits in different regions of the country
- Understanding patient and practitioner perspectives on a range of topics relevant to HPV and cervical cancer through observation and interviews

“Cervical cancer mortality rates are seven times greater in Latin America and the Caribbean than in North America.”
- PAHO
http://www.ho.org...2010.pdf

Visual Inspection with Acetic Acid (VIA) is a simple screening test that provides immediate results. An affordable alternative to the Pap Test, it requires few materials, which are seen above. Source:
http://www.human.comell.edu/dns/globalhealth/undergraduate/stufieldxp.cfm
Public Health Significance

HMMP aims to provide a deeper understanding of the health-related experiences and needs of the people living with HIV/AIDS who are receiving care in Houston/Harris County.

Public Health Essentials:

Monitor: The HMMP monitors the behavioral risks and clinical outcomes of individuals in HIV care.

Evaluate: The success of the HMMP depends on the providers and the patients selected to participate. Selected participants have a unique chance to help guide decisions that could improve the quality of care and life for people living with HIV/AIDS.

HMMP provides valuable estimates of health care utilization, quality of care, severity of need and effectiveness of prevention messages. HMMP data may help estimate resources needs for treatment and services for HIV-infected persons.

HIV/AIDS Surveillance Project

The Houston Medical Monitoring Project (HMMP) uses a puzzle logo to reflect the goal and objectives of the project. The idea is that HMMP is putting together a puzzle whose pieces include, access to care and quality of life and prevention services etc. The piece that is missing is “Y-O-U” which could be either the provider or the patient.

http://www.houstontx.gov/health/Epidemiology/HMMP/index.html

Special events/ duties during your practicum

- Reviewed and managed HMMP database
- Received training on web-based tracking system and data analysis
- Managed HIV/AIDS care providers database
- Assisted with disease surveillance data entry and management

“Our health care system must be accountable, offering a quality, equitable and sustainable means of keeping us healthy as individuals and as a community”
~Faithful Reform in Health Care~

Houston Medical Monitoring Project (HMMP): Facility Attributes Survey

By: Umber Shahid

The Houston Medical Monitoring Project (HMMP) is a special surveillance project, sponsored by the Center of Disease Control and Prevention (CDC).

The project is designed to produce local representative data of met unmet needs of people living with HIV/AIDS (PLWHA) who are receiving care in Houston/Harris County. Data are collected through personal interviews and medical record abstraction of selected participants.

Public Health Significance

HMMP aims to provide a deeper understanding of the health-related experiences and needs of the people living with HIV/AIDS who are receiving care in Houston/Harris County.

I was involved with the HMMP facility attributes survey for 2011. This project involved the collection of selected participating facilities’ inventory of funding sources, insurance types accepted, research affiliations, and preventive & clinical services provided for PLWHA in Houston/Harris County using a structured questionnaire instrument. The product was a summary report of all participating providers’ facilities and services & quality of care based on the analysis of information from the database.
Shoulder to Shoulder: Public Health in Santa Ana, Honduras

By: Zuhair Siddiqui

I flew to Honduras at the end of April to work in a small village clinic with the Baylor Shoulder to Shoulder Program. This program works with the Health Committee of Santa Ana. Santa Ana has approximately 700 residents, and is located in the mountains alongside the western border of Honduras, next to El Salvador.

I traveled down to the clinic with a medical brigade mainly comprised of medical students and faculty from Baylor College of Medicine.

Public Health Significance

The Shoulder to Shoulder Program provides medical attention to thousands of people every year. This service would otherwise be much harder to find in the mountainous region in western Honduras.

The questionnaires will help give clinic visitors a voice. While the low-cost clinic does provide many services that are otherwise difficult to find, there are still needs that are not being met. The questionnaire also provides demographic information about visitors. This also provides officials with a better understanding of the population they are serving. In all, this information will be given to public health officials in the capital to explain the importance of the clinic.

Twice a year, a group comes down to Honduras to operate the village clinic. During this time, people come from all over to access services provided. I worked alongside medical students for two weeks and administered a newly designed instrument to collect data for the clinic. I spend most of my days interacting with patients and administering the surveys to willing participants. I also participated in a community health workers training, where we taught participants about ways to improve public health in their communities.

The community health workers training was an equally important component to public health. This training could have far-reaching effects, as the community health workers came from all different parts of the region. By providing them with new public health information, it could impact residents near and far.

My goal was to help Honduran residents who came to the clinic seeking help. Hopefully, my time with the program will help improve the program so that more people can get the help they need.
Faculty On-Boarding Process Improvement

Faculty on-boarding process flow maps were developed for each department involved in the process. The process maps were instrumental in understanding the current faculty on-boarding process at BCM and in determining problem areas. From these processes we were able to devise a suitable solution - a multifunctional web page dedicated to faculty on-boarding only.

Responsibilities:
- Developing as-is process maps, representing each department involved in the process.
- Determining redundancies in the process, process steps & documents.
- Creating a sample web page that would support an integrated faculty on-boarding process at BCM.

“Organizational buy in is essential to the success of a project - so listen to the voice of the customer.”

Faculty On-Boarding Process Improvement at Baylor College of Medicine

By: Alexandria Stack - Office of the President Intern

Faculty on-boarding is the process of recruiting & hiring an individual for the purpose of fulfilling both a teaching & clinical position. The current faculty on-boarding process at BCM is decentralized & inefficient.

With variances leading to problems with quality, the Office of the President aimed to standardize the process across the entire organization.

I assisted in all phases of the project:
1: Determine department specific roles & responsibilities.
2: Establish an aggregate view.
3: Develop & implement solution.

To complete phase 1 & 2, we met with each department to determine their role in the process. Results were reported as process maps. Department specific process maps were compiled to create an aggregate view. To address the problems in the current process a website is to be developed allowing the faculty candidate to complete the application online. Each department will have access to the candidate’s digital documents. This step will require IT integration.

Public Health Significance

BCM is not in itself a public health organization, but fits within the realm of public health and the overall larger health care system. As BCM is a medical university, they uphold the 8th essential public health service: assure competent public and personal health care workforce.

The faculty on-boarding process improvement project directly supports this public health service as faculty have a clear impact on a student’s quality of education. Additionally, BCM’s interinstitutional agreement allows their students the opportunity to take classes in a variety of disciplines, including Public Health at UT-SPH.

In addition to supporting the 8th public health service, BCM is involved in a variety of research projects; thereby supporting the 10th public health service. Research at BCM is not limited to but includes: HIV/AIDS, cancer, and diabetes.

http://jimmystreet.com/articles/what-is-success-and-how-to-achieve-it/

http://qualitysafety.bmj.com/content/15/suppl_1/i10.abstract
Health Care Reform 2010
- Nursing Home Transparency and Improvement

The number of people aged 65 and older is 35 million in 2000, 36.7 million in 2005, and expected to reach to 72 million by 2030 (Guo & Castillo, 2011). When people are getting older, the possibility of having chronic illness, daily-life disability, or low physical functioning can be higher. As a result, a growing need for long-term care services is very likely to happen as the U.S. population keeps growing old.

Quality of care in nursing facilities has been concerned a lot for a long time. It can be measured by deficiencies, substandard quality of care, and complaints.

According to Memorandum Report: Trends in Nursing Home Deficiencies and Complaints (2008), deficiencies and complaints in 2007 and identifies trends from 2005 to 2007 in nursing homes were reported. From the report, deficiency rate in nursing facilities was prominent, for example, at least one deficiency could be cited in more than 91 percent of nursing homes. Three most commonly cited deficiencies were quality of care, resident assessment, and quality of life.

Health Care Reform 2010
- Nursing Home Transparency and Improvement

The Patient Protection and Affordable Care Act (PPACA) was signed into law by President Barack Obama on March 23, 2010. The Act also known as the Health Care Reform aims to improve quality and efficiency in the U.S. health care system.

The Nursing Home Transparency and Improvement is the Subtitle B under the Title VI of the PPACA.

“The Act would give families a lot more information about the nursing homes they put their loved ones in, including whether they have adequate staff.”

The Act would give families a lot more information about the nursing homes they put their loved ones in, including whether they have adequate staff.

Special events/ duties during the practicum
- Writing policy brief and impact assessment for the Nursing Home Transparency and Improvement
- Interview the National Consumer Voice for Quality Long-Term Care and American Health Care Association via phone

“Improving quality of care and accountability in nursing homes is targeted by the Nursing Home Transparency and Improvement.”

Spring 2011 ● Guan-Uei Tsai ● UTSON ● PPACA Nursing Home Transparency and Improvement

http://blog.directcarealliance.org/2009/07/ask-congress-to-include-nursing/

“Improving quality of care and accountability in nursing homes is targeted by the Nursing Home Transparency and Improvement.”
Public Health Significance

Did you know that approximately 8.4% of children in the US have a disability, but that somewhere between 31-61% of maltreated children are disabled? Although there has been an immense amount of research done to try and understand why children are victims of maltreatment, very little has been done specifically targeting children with special needs despite this group being recognized as a high-risk group. The purpose of this study is to examine maltreatment among those children born with one or more birth defects. To our knowledge, this type of data linkage has never been done in Texas or any other state.

Are children with birth defects more likely to be abused?

By: Bethanie Van Horne

The focus of this practicum experience was to start the process necessary for the data linkage using data from the Texas Birth Defects Registry, Child Protective Services, and the Office of Vital Statistics in order to describe child maltreatment within those children born with one or more birth defects. To our knowledge, this type of data linkage has never been done in Texas or any other state.

As one of the leads on the project, my role was to formulate the aims, determine the best methods for analysis, and provide the necessary background materials to aid in project buy-in.

Birth Defects & Child Maltreatment

Of the 400,000 births in Texas each year, 14,000 will have one or more major congenital anomaly.

Are children with birth defects more likely to be abused?

As one of the leads on the project, my role was to formulate the aims, determine the best methods for analysis, and provide the necessary background materials to aid in project buy-in.

Every child deserves a happy childhood...

Source: http://www.celebritys.org

In 2010, CPS confirmed nearly 40,000 cases of child maltreatment in Texas.
The Role of Management in the Community Health Clinic Setting

By: Nastasya A. Volkovicher

I was fortunate enough to do my practicum at Andrew Civitello, MD, PA – the health clinic that diagnoses and treats cardiac patients. I followed a physician, performed variety of tasks, including greeting the patients, reminding them to follow-up with the next appointment, organizing medical records, observing a number of procedures, such as Echocardiogram, Electrocardiogram, and cardiovascular treadmill stress testing.

Final product is a report that discusses the role of management in the healthcare setting and the importance of cardiovascular disease prevention.

Public Health Significance

According to CDC, cardiovascular disease (CVD), in the form of coronary heart and stroke, is highly preventable, yet the disease remains the first and third leading cause of death in the United States. CVD is an important public health concern as the disease continues to cause death, premature permanent disability and grow in prominence with its social and economic consequences.

Community health clinics play an essential role in detecting individuals that are at risk of developing CVD using diagnostic tools and treating patients that have symptoms of the disease in order to prevent further complications of CVD and mortality.

“Management is efficiency in climbing the ladder of success; leadership determines whether the ladder is leaning against the right wall.”

Dr. Stephen Covey
The Public Health Essential Service that most closely relates to my practicum experience is inform, educate, and empower people about health issues. Educating and showing our youth that exercise and nutrition can be interesting and fun is the key to preventing health complications that often occur with overweight and obesity while fighting the epidemic facing our nation.

It’s the Summer to Discover at the Trotter Family YMCA

By: AMANDA WILCOX

My public health practicum experience was spent at the Trotter Family YMCA. I was tasked with developing a theme, layout and teaching materials to run for a four day camp focused around nutrition and exercise for children age 8 to 15. Food Fight Camp was the project that unfolded.

Food Fight was designed to be a half day camp with a focus on physical activity and nutrition. These areas are often times not of interest to children and need combined with engaging activities.

Camp time each day will be divided into three engaging activity blocks:
- Inside learning about nutrition and exercise,
- Outside practicing new physical fitness activities,
- Wind down in the Trotter Family YMCA’s new Youth Interactive Room experiencing activity through the Nintendo Wii and Xbox Kinect.

The last day of camp will conclude with an actual food fight between favorite junk foods and healthy but delicious snacks. This camp is sure to be fun and dirty while being educationally engaging!

Public Health Significance

The YMCA makes accessible the support & opportunities that empower people & communities to learn, grow & thrive. With a focus on youth development, healthy living & social responsibility, the Y nurtures the potential of every youth & teen, improves the nation’s health & well-being, & provides opportunities to give back & support neighbors.
Operations Management

Developing Implementation Procedures and Staffing Procedures

By: Sewon Yoo

During my internship at Healix, I was asked to work on a variety of tasks. I worked closely with the Operations Director to develop and update implementation procedures and guidelines. Because many of the forms were outdated, I was asked to receive input from clinical operations, such as pharmacy and nursing, as well as division managers to determine what areas required revision. The finished product was an updated implementation checklist that included all the tasks that were necessary to implement a new site or transition a current one.

I also worked with the staffing department to develop a staffing department manual. Because there was no comprehensive guidebook, I worked with several personnel to organize a manual that entailed all the tasks carried out by the staffing department.

Public Health Significance

The public health services my practicum most closely exhibited are assuring a competent public health and personal healthcare workforce and evaluating effectiveness, accessibility, and quality of personal and population-based health services. By partnering with physicians, Healix manages the non-clinical aspects of infusion therapy. Doing so allows the physician to use more of their time on patient care and increases the efficiency of the clinic through proper staffing numbers and guidelines for the infusion therapy.

My responsibility was to ensure that procedures were up to date and uniform throughout the sites. It most closely resembled the service of assuring a competent personal healthcare workforce.
Public Health Significance

My practicum experience would most likely align with the Essential Service of Public Health #5, “Develop policies and plans that support individual and community health efforts.” The policies and plans that were developed in my experience were on an organizational level rather than a community level. However, the policies still affect the health of the patients that receive care in the facility.

Most of the patients who are transferring into The Methodist Hospital are seeking “higher level of care” that is often not available to sicker patients in community hospitals. The sooner the transfer is able to occur, the sooner the patient is able to receive the higher level of care that is needed for their condition. This is why inefficient work processes should be eliminated in the transfer center.

Because Methodist Hospital has a great variety of nationally high-ranking specialties, the needs of each patient varied greatly and the transfer center had to recognize these needs.
For more information regarding The University of Texas School of Public Health, Office of Public Health Practice and the practicum program, please visit: http://www.sph.uth.tmc.edu/academics/practicum/